University of Alberta

Patient, Therapist, and Observer Perspectives on Cohesion and Alliance and their Relationship to Outcome in Psychodynamic Group Psychotherapy for Persons Experiencing Complicated Grief

by

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QUOTE PAGE

Psalm 121

I lift up my eyes to the hills–
where does my help come from?
My help comes from the Lord,
the Maker of heaven and earth.

He will not let your foot slip–
he who watches over you will not slumber;
indeed, he who watches over Israel
will neither slumber nor sleep.

The Lord watches over you–
the Lord is your shade at your right hand;
the sun will not harm you by day,
nor the moon by night.

The Lord will keep you from all harm–
he will watch over your life;
the Lord will watch over your coming and going
both now and forevermore.

Taken from the HOLY BIBLE; NEW INTERNATIONAL VERSION © 1978 by the New York International Bible Society, used by permission of Zondervan Bible Publishers.

DEDICATION

To my husband and dear friend John: I am thankful for his wisdom, ongoing support, and encouragement. To my parents Peter and Kathleen, and grandparents John and Evelyn and Alex and Anna: I am grateful for their life lessons, hard work, and great sacrifices that allowed me opportunities in this great country of Canada that they never had. To my Lord and Savior Jesus Christ: For His great faithfulness and mercy to me.

ABSTRACT

The purpose of the current study was to investigate whether three perspectives on cohesion and alliance were similar, whether alliance and cohesion were associated, how alliance and cohesion developed over phase of therapy, and whether alliance and cohesion predicted successful outcome. Ninety-nine patients with complicated grief (79 women and 20 men), ranging in age from 19 to 67 years, were matched and randomly assigned to participate in either supportive or interpretive short-term time-limited psychodynamic group psychotherapy. Nine supportive and nine interpretive groups were conducted. Fourteen outcome measures were completed three times (pre-therapy, post-therapy, and 6-month follow-up), while three group process measures (one cohesion and two alliance measures) were completed from three perspectives (patient, therapist, and observer) at three times during therapy (beginning, middle, and termination). The results indicated that the three perspectives were not the same in their ratings of cohesion and alliance. Patients may be in the best position to rate their own alliance or cohesion, as other perspectives may not be able to accurately assess what is primarily a subjective experience. Correlation coefficients between cohesion and alliance revealed that patient ratings of cohesion were related to alliance, particularly regarding their ratings of the therapist's positive qualities. For patient ratings of cohesion and alliance, the strongest relationships were observed at beginning and termination phases of therapy, thus demarcating a high-low-high pattern. The low correlation at middle therapy may reflect the differentiation and high conflict between group members that is typically experienced at this time. Patients in both the interpretive and supportive treatment conditions

experienced improved outcome. Patient-rated alliance was a better predictor of outcome than cohesion. The main implications of these results are that cohesion and alliance ratings should be obtained from the patients' perspective at each therapy session to determine if remedial interventions, such as use of supportive techniques, are required. Future research into individual ratings of cohesion versus group-as-a-whole ratings, and the relationship between therapist characteristics and alliance, would be of interest.

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INTRODUCTION

Overview

The efficacy of group psychotherapy has been generally supported by research (Bednar & Kaul, 1994; Burlingame, Fuhriman, & Mosier, 2003; Fuhriman & Burlingame, 1994), but many questions remain about the relationships between group process and outcome, and the role of specific therapeutic factors. A number of group psychotherapy therapeutic factors have been identified, such as the instillation of hope, altruism, and universality (Yalom, 1975). Of these factors, cohesion (i.e., the bonds between group members) is seen as affecting the process of therapy and member outcome. Cohesion has been a focus of considerable research attention, but this has not been without theoretical debate and controversy. Researchers have faced difficulties defining, operationalizing, and measuring the construct of cohesion (Horne & Rosenthal, 1997). Definitional ambiguity and variation has hampered attempts to understand cohesion empirically. This has caused reviewers to lament that the understanding, measurement, and theories of cohesion had not advanced much since reviewing the state of knowledge in 1985 (Bednar & Kaul, 1994; Kipnes, Piper, & Joyce, 2002).

Relationships often referred to in cohesion research are those between group members. Rarely studied are the distinct relationships between each group member and the therapist, otherwise known as the therapeutic alliance. Therefore, how alliance relates to outcome and how alliance between members and therapist develops is relatively unknown. By contrast, in individual psychotherapy research a strong alliance between therapist and patient has consistently been found to be a major factor in successful outcome (Martin, Garske, & Davis, 2000).

Consequently, many questions remain. How does cohesion develop during the course of group psychotherapy? Is cohesion within the group similar to alliance to the group therapist? What is the relationship of cohesion and alliance to therapy outcome? Are cohesion and alliance ratings from different perspectives (member, therapist, and observer) similar? The nature and function of cohesion and alliance and their relationship to outcome needs clarification for group psychotherapy. Also, what relationship, if any, does gender of the group member have to therapy outcome or to the development of cohesion and alliance? This study attempted to address these questions within the context of short-term psychodynamic group psychotherapy for persons with complicated grief.

This introduction continues with a more detailed examination of the concepts and issues raised in this overview. An historical description of group psychotherapy, a discussion of group dynamics, a depiction of how cohesion develops in a group, and its maintenance, definition, and measurement will be presented. Included will be a review of cohesion research literature and evidence for cohesion's relationship with outcome. Following this, the focus of the discussion will be the role of the alliance in individual psychotherapy and a review of group psychotherapy studies examining both alliance and cohesion. Next discussed, to provide a context for the current study, will be gender differences in relation to group psychotherapy outcome. Because of the population of interest in the current study, included are reviews of complicated grief syndrome and the success of group therapy treatment for persons with complicated grief syndrome. The introduction concludes with the methodological and design considerations for the current study and the research hypotheses.

History of Group Psychotherapy

The rich history of group influence can be traced back to the earliest civilizations when tribal and religious leaders used social groups to promote healing and behavioral change (Scheidlinger, 1993). Practiced in Europe and America since about the turn of the 20th century, group psychotherapy (a subset of group influence) involved a professionally guided approach to the treatment of pathology. Group psychotherapy's origins and practice in the early part of the past century were diverse. It originated within the disciplines of medicine, sociology, anthropology, psychology, and the theater. It applied to people in a variety of circumstances, such as hospitalized patients with psychoses in mental institutions, hospitalized patients with tuberculosis or diabetes, and to outpatients with non-psychotic illnesses. It also applied to children, as well as adults.

Generally attributed to the work of Pratt, Moreno, Marsh, Lazell, Burrow, and Adler, early group psychotherapy originated circa 1920s. The diverse theoretical areas and orientations of these and other contributors, including personality theory, systems theory, group dynamics, and psychoanalytic, existential, experiential, and behavioral theories, added to the diversity of group psychotherapy practice (Fuhriman & Burlingame, 1994). However, this diversity also contributed to ideological rivalries and separation into theoretical camps.

By the 1930s group psychotherapy was firmly established, applied to several clinical populations, and practiced mostly by psychiatrists. It was not until World War II that group psychotherapy reached its prominence. Group psychotherapy was more broadly applied as it became a convenient solution to a wartime crisis, a response to a shortage of military psychiatrists (Scheidlinger, 1993). The decade of the 1970s witnessed the largest growth spurt in the clinical practice of group psychotherapy. Surveys at the time estimated that at least one half of all inpatient settings in America were using group treatments. In addition to its prevalence in inpatient settings and its traditional use in outpatient settings, group psychotherapy and its methods exist in virtually all human service facilities.

Group psychotherapy emerged from the ideological rivalries and struggles of earlier years to a broadening of perspectives, a loosening of rigidities, and an eclectic approach in clinical practice today, but not without difficulty (Scheidlinger, 1993). Lack of conceptual clarity remains a by-product of the conglomerate or "borrowed" development of group psychotherapy from individual psychotherapy. Group psychotherapy theorists had not developed a conceptualization of the primary, potent, and unique characteristics of group psychotherapy and because of this appropriate measures could not be developed or employed in research (Bednar & Kaul, 1994).

In stark contrast to group psychotherapy's rich developmental history is the comparative infancy of its research history. While diversity in the origins of group psychotherapy added richness to its development, it also added theoretical and conceptual complexity, creating difficulties in research efforts. This complexity in large part contributed to a chasm between group psychotherapy clinicians and researchers, which grew in the 1950s and persisted into the 1980s.

Although practiced for decades, it was not until the 1960s that group psychotherapy reviewers first questioned the overall efficacy of group psychotherapy (Fuhriman & Burlingame, 1994). It was difficult to draw firm conclusions because studies were characterized by inadequate empirical testing of efficacy due to variability in measures used, lack of comparison groups, and the heterogeneity of patients and therapists. Later reviewers, in the 1980s, commented on both the general and differential efficacy of group psychotherapies. They reviewed studies that applied specific approaches to specific populations and studies using multiple comparison groups. In general, research findings from the approximately 700 studies, spanning the 1960s to 1980s, pointed to the efficacy of group psychotherapy for diverse populations, irrespective of theoretical persuasion (Bednar & Kaul, 1994; Fuhriman & Burlingame, 1994). In a meta-analytic review of 111 studies published since the 1980s, group therapy participants fared better than wait-list controls (effect size = .58), indicating further support for group therapy as an efficacious treatment (Burlingame et al., 2003). Group psychotherapy also seems to be as efficacious as individual psychotherapy (Orlinsky, Grawe, & Parks, 1994; Piper, 1993). In a meta-analytic review of 23 outcome studies that compared individual and group therapy within the same study no significant difference (effect size = .01) in outcome between individual and group therapy was found (McRoberts, Burlingame, & Hoag, 1998).

Today, given that both group and individual psychotherapy are efficacious, and considering the health care economic climate, group psychotherapy may be a cost-saving measure. Access to and use of group psychotherapy may supersede individual psychotherapy for economic reasons, mirroring the factors contributing to the rise of group psychotherapy during World War II. The delivery of healthcare in North America is changing from how to find patients to meet available services to how to provide a service to meet the needs of a certain population given limited financial resources. Responses to this major paradigm shift have included the development of a set of basic services accessible to all, and efforts to define what these services might be in the face of limited resources. The implication for psychotherapy services is direct competition with other services for funding. Therefore, the traditional way of delivering psychotherapy may change. Although individual psychotherapy has been esteemed as the "gold standard" treatment, and group psychotherapy as a secondary modality, in view of similar efficacy the tides may turn in favor of group psychotherapy (MacKenzie, 1997). It is also possible that combining group and individual psychotherapy as a treatment modality will become a practice standard. Some authors have argued that concurrent group and individual therapy (e.g., offered by the same therapist or two separate therapists) may have a potentiating effect (Leszcz, 1998).

As this historical overview illustrates, group psychotherapy practice is well established and is an effective treatment modality. It has become conceptually more pluralistic, as shown by its broader and more eclectic approach. However, conceptual clarity is required in order for the field to advance. It has now been about 100 years since its inception and by all appearances, group psychotherapy will continue to be a strong contender and perhaps a primary modality of treatment in the new millennium. It is therefore imperative to continue research efforts in the field, and to shift the focus from demonstrating the efficacy of group psychotherapy to discovering why and how it works and as a consequence how to make it better.

Researchers have attempted to answer the "why and how" question by turning to the importance of factors common to all groups, such as cohesion. Discussed next is the connection between cohesion and group dynamics.

Group Dynamics

There has been a broad clinical application of group psychotherapy approaches. The elements these approaches have in common may represent the underlying factors that contribute to group psychotherapy benefit. All groups irrespective of theoretical orientation or population served, if allowed to develop in their interactional processes, will be governed by group dynamic elements (MacKenzie, 1997; Rutan & Stone, 1993). These group dynamic elements are group structure, norms, size, development, social roles, cohesion, and therapeutic factors. Group structure defines the boundaries within and beyond the group. Group norms provide the implicit or explicit expectations of how a group runs. Group size predicts the level of interaction. Group development describes a natural progression through stages of engagement, differentiation, interactional work, and termination. Group social roles bridge between member personality and group functioning. Group cohesion is the general emotional tone of the group-as-a-whole. Group therapeutic factors are process mechanisms that contribute to improvement independent of the theoretical orientation of the therapist. Considerable research has centered on therapeutic factors, such as altruism, catharsis, cohesion, family reenactment, instillation of hope, identification, insight, interpersonal learning, self-disclosure, universality, and vicarious learning (Yalom, 1975). However, a significant relationship between outcome and these factors has not been established (Bednar & Kaul, 1994) except for perhaps cohesion and interpersonal feedback (Morran, Stockton, Cline, & Teed, 1998). The factors that were universally valued by a diverse set of group psychotherapy populations were cohesion, interpersonal learning, and catharsis (Fuhriman & Burlingame, 1994), but research on the effect of these factors on outcome continues.

Cohesion in the group dynamic context (MacKenzie, 1997) is defined as the group's sense of togetherness. Group cohesion interacts with other group dynamic elements, particularly group norms, group development, and group therapeutic factors. Failures to address group norms, such as unacceptable behavior within a group, negatively influence cohesion levels. Conversely, the level of cohesion can increase rapidly during the initial engagement stage of group development as members search for common interests and issues and with the recognition that the group is unique and safe. Cohesion can also increase in response to the presence of supportive therapeutic factors, such as universality, acceptance, altruism, and hope, and to self-revelation therapeutic factors, such as self-disclosure and catharsis in group. These supportive and self-revelation therapeutic factors appear at the beginning stages of group psychotherapy and are important in the early development of cohesion. There is a reciprocal relationship between cohesion and all the therapeutic factors, each promoting the development of the other. However, cohesion is a dynamic concept, in that what promotes cohesion early may reduce it at a later stage (Rutan & Stone, 1993).

Cohesion Development and Maintenance

Clinical strategies to develop and maintain cohesion are of interest to both therapist and researcher. To this end, Braaten (1991) constructed a generic, comprehensive, and multidimensional model of cohesion based on an integration of empirical studies and theoretical reviews. The model consists of pre-group conditions, early group conditions, and a five-factor in-group dimensional model of cohesion.

Pre-group conditions affect the development of cohesion during psychotherapy. These pre-group conditions include the selection of suitable participants, those who have the capacity to connect and bond; creating a suitable composition of the group (e.g., homogeneity of problem focus); effective orientation, training, and contracting. These set the boundaries and conditions of therapy.

Development of cohesion early in the group depends on therapist actions such as underscoring the importance of mutual dependency and responsibilities; encouraging interaction; reinforcing supportive factors; resolving conflict and rebellion; and constructive norming and culture building (Braaten, 1991; MacKenzie, 1998). A major obstacle to the development of cohesion early in a group is member avoidance and defensiveness (Braaten, 1990). As the process moves into the mid-therapy stage of group development, the atmosphere is more confrontational and cohesion is at risk. The therapist has to encourage differentiation between members, but also has to monitor negative interactions and retain focus on important issues.

As part of Braaten's (1991) multidimensional model, the five-factor in-group aspect consisted of (a) attraction and bonding; (b) support and caring; (c) listening and empathy; (d) self-disclosure and feedback; and (e) process performance and goal attainment. Attraction is the immediate physical draw and perceived similarity of group members, whereas bonding refers to its development into a long-term commitment. Support and caring is the acceptance and active communication of positive regard between members. Listening and empathy is more than just hearing, but is receiving and responding to both the cognitive and affective message of others. Self-disclosure and feedback is an essential openness and sharing of private hurtful events and risking giving comments that may be challenging and confrontational. Process performance and goal attainment are related. As members comment on improvement in symptoms or self-concept during group psychotherapy, this in turn increases the perceived value of the therapy process and group cohesion.

This model offers a basis for the development and refinement of cohesion measures. Although the group process literature is developing, there is support for factors that enhance or strain the development of cohesion (MacKenzie, 1998). This is of interest to therapists seeking to maximize the outcome of therapy.

A study by Budman, Soldz, Demby, Davis, and Merry (1993) examined group cohesion according to phase of therapy. Their findings were consistent with current understanding of group development. They used two scales to measure cohesion; the Individual Group Member Interpersonal Process Scale (IGIPS-II; Budman et al., 1993) and the Harvard Community Health Plan Group Cohesiveness Scale (HCHP-GCS; Budman et al., 1987, 1993). Budman and colleagues (1993) reported that in the beginning stages (i.e., first five sessions) of time-limited group psychotherapy members talked about their lives outside of the group. There was little focus on the therapist. During the middle phase of therapy (Sessions 6 to 10) members' contributions to interactions were still important but discussion turned to how helpful the sessions had been thus far and discussion about the group's outcome. Cohesive groups felt helped already and were optimistic about outcome. In the final phase of therapy (last five sessions), one to three members become the focus of a session and discussion was more about inside-of-the-group content rather than outside-of-the-group content. Extensive discussion about the leader was antithetical to cohesion during the final phase.

Characteristics of a cohesive group are a low level of defensiveness, a high level of member participation, acceptance, compatibility, trust, and spontaneity, as well as a high level of challenging, confronting, and risk-taking behavior. Cohesive members are committed to the work and goals of the group (MacKenzie, 1997). Although cohesion appears important to a group and its pattern changes as the group develops, relatively little research has been conducted to examine levels of cohesion during group psychotherapy and its relationship to outcome at various stages of development. Further research on cohesion definition and development remains sorely needed.

Cohesion Definition

The acceptance of cohesion as a therapeutic factor has been widespread (Crouch, Bloch, & Wanlass, 1994); however, its definition, structure, and measurement have been the subject of considerable debate (Budge, 1991; Dion & Evans, 1992; Mudrack, 1989). Cohesion has also been widely investigated. However, it is a complex variable and has resisted precise definition and measurement (Drescher, Burlingame, & Fuhriman, 1985).

Conclusions from studies using different definitions are difficult to compare and integrate. The current literature on cohesion mainly focuses on one aspect of the relationships in a group therapy setting, such as the member to group relationship rather than member to leader relationships (Burlingame, Fuhriman, & Johnson, 2001). Cohesion has been described like "dignity, in that everyone can recognize it but no one apparently can describe it, much less measure it" (Bednar & Kaul, 1994, p. 651).

Definitions of cohesion are varied, perhaps as varied as the fields of study from which they arose, fields such as psychology, sociology, anthropology, and political science. Cohesion was first conceptualized by Festinger and colleagues in the 1940s and 1950s as a "field of forces" that influenced individuals to continue to be a part of a group, but was later conceptualized as interpersonal attraction by Lott and Lott in the 1960s (Dion, 2000). In the 1980s, cohesion was conceptualized as a bidimensional (e.g., Carron and associates' "task" versus "social" cohesion) or as a dimensional construct (Dion, 2000).

Definitions have generally focused on the group as a whole, but most have commonly and narrowly operationalized cohesion as member attraction to the group (Evans & Jarvis, 1980). Some authors describe cohesion as "a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its goals and objectives" (Carron, 1982, p. 124), or as "a basic bond or uniting force" (Piper, Marrache, Lacroix, Richardsen, & Jones, 1983, p. 95). Others describe cohesion as "group connectedness, demonstrated by working together toward a common therapeutic goal, constructive engagement around common themes, and openness to sharing personal material" (Budman et al., 1993, p. 202), or "the degree of the members' sense of belonging to a group or, more simply, as the attractiveness of a group for its members" (Frank, 1957/1997, p. 63). Depending on the definition, cohesion is both a therapeutic factor and a condition that facilitates the operation of various therapeutic factors (Crouch et al., 1994).

Recently, cohesion has been represented as a tripartite concept, the relationship dimensions being (a) group member-to-group member, (b) group member-to-group-as-a-whole, and (c) group member-to-therapist. However, little attention has been given to the distinct contribution of the group member-to-therapist relationship dimension, otherwise known as therapeutic alliance (Burlingame et al., 2001). Identifying the contribution of member-to-therapist alliance as compared to member-to-member cohesion during psychotherapy is an important distinction as these dimensions may have differential influences on group outcome. In addition, measures are needed that can discriminate these relationship dimensions.

Cohesion Measurement

The structure of cohesion has been described as both unidimensional (Budman et al., 1993; Piper et al., 1983) and multidimensional (Drescher et al., 1985; Silbergeld, Koenig, Manderscheid, Meeker, & Hornung, 1975). Early measures were usually unidimensional and based on narrow definitions, which generally limited their applicability. Later research describes the structure of cohesion as a multidimensional construct with primary dimensions that describe all groups and secondary dimensions that describe specific types of groups (Cota & Evans, 1995). Additional work on further specifying the structure of cohesion would enable the development of appropriate measures. Briefly reviewed are a number of process measures used to study cohesion.

Typically, process measures of cohesion are from the perspective of the group member. The first and most commonly used measure of cohesion was the Cohesiveness Scale (CS; Gross, 1957). It is a member-rated measure of the attractiveness of the group, usually completed at termination of therapy. Despite its widespread use, the reliability and validity of the CS are unknown. Other member-rated inventories used to measure cohesion included the Group Climate Questionnaire-Short Form (GCQ-S; MacKenzie, 1983), the Group Environment Scale (GES; Moos, 1981), the Group Atmosphere Scale (GAS; Silbergeld et al., 1975), and the Group Attitude Scale (GATS; Evans & Jarvis, 1986).

Less common than member-rated measures are observer-rated measures of cohesion. Two measures of note are the Harvard Community Health Plan Group Cohesiveness Scale (HCHP-GCS; Budman et al., 1987, 1993) and the Individual Group Member Interpersonal Process Scale (IGIPS-II; Budman et al., 1993). The HCHP-GCS requires one rating of a 30-minute videotape segment, while the IGIPS-II involves a detailed statement-by-statement rating. The HCHP-GCS was the first measure described as a multidimensional observer-rated cohesion scale. However, a factor analytic study identified it as a unidimensional construct (Budman et al., 1989). HCHP-GCS ratings relate to group psychotherapy outcome (Budman et al., 1987, 1989).

Tools for measuring cohesion are beginning to move from unidimensional to multidimensional approaches. In spite of advances, more work is required in identifying and measuring the components of cohesion, and developing appropriate tools. Given the available tools, what do we know from cohesion research?

Cohesion Research

As an attempt to integrate the empirical literature on cohesion and provide a direction for future research, a four-level multidimensional process classification system was developed and applied to 25 studies published between 1961 and 1984 (Drescher et al., 1985). The person dimension, which was the first of four dimensions in the classification system, revealed that most studies assessed cohesion from the perspective of the member. Generally, there were few studies that looked at the perspective of the therapist, subgroups, or group-as-a-whole. The second dimension, the variable function, showed that many studies treated cohesion as a response variable to an antecedent event. Only two studies investigated cohesion as an antecedent variable with outcome as the response variable (Flowers, Booraem, & Hartman, 1981; Yalom, Houts, Zimerberg, & Rand, 1967). The third dimension, measurement strategy, revealed that nearly all studies opted for measurement of covert behaviors while a few studies used physical measurement indices. Covert behaviors, such as thoughts, need to be member-rated, as these constructs are not readily observable by other raters, such as therapists. Less common were studies that measured verbal content, verbal style, overt behavior, or therapeutic intervention. The last dimension, time, described the frequency or interval of variable measurement. Many studies measured cohesion only once during therapy while as a developmental construct it warranted multiple assessments over phase of therapy. In a review of nine cohesion studies, published since 1985, characterization of cohesion was still as cause and effect and the advancement of knowledge remained largely unchanged (Bednar & Kaul, 1994).

The review by Drescher and colleagues (1985) using the multidimensional process classification system identified areas for further research. In view of the complexity of cohesion, investigation is required across all categories of the person dimension. Cohesion measurement needs to occur more than once as an antecedent and as a response variable. Convergence across a variety of measurement strategies and a better understanding of how cohesion develops during group psychotherapy is required. The multidimensional process classification system does not provide for an evaluation of construct validity, psychometric properties of instruments, or study design, so this type of evaluation also needs to be included.

Measurement issues remain, such as definitional variation and relationships between ratings from different perspectives (e.g., member and observer). There are no reported studies of using the same measures to obtain member, observer, and therapist perspectives on cohesion or on outcome. This is of interest to investigate whether ratings from different perspectives are equivalent and whether ratings from certain perspectives are better predictors of outcome.

Notwithstanding definition and measurement difficulties associated with early cohesion research, most studies that examined cohesion and outcome found a positive correlation. A significant positive correlation was found between cohesion and member ratings of symptom improvement and overall functioning (r = .44 and .51, respectively, Yalom et al., 1967). Cohesion was also found to increase over the course of group development, as rated by 12-hour marathon group members (Weiss, 1972). Group-as-a-whole cohesion and group alliance ratings at the initial one-third and final one-third of a session were positively correlated with significant improvement in self-esteem and psychiatric symptoms (*r* = .58 to .76, Budman et al., 1989). In a study of cohesion, defined as group member relationships with the group-as-a-whole, patients who reported feeling accepted and supported by other group members also reported the most improvement in symptoms (MacKenzie & Tschuschke, 1993). Related to this were findings that complicated grief patients who experienced more negative than positive feelings at the first session were more likely to drop out of therapy. In addition, therapists rated cohesion as lower for those patients who eventually dropped out (McCallum, Piper, Ogrodniczuk, & Joyce, 2002). Cohesion was also related to improvement 12 and 18 months after treatment as seen in a multimethod and multiperspective case study approach of two long-term analytic inpatient groups (Tschuschke & Dies, 1994). Patients with the most successful outcome rated cohesion at a high level whereas patients with unsuccessful outcome rated cohesion at a low level. This rating of cohesion at a high level began early in treatment and continued throughout treatment.

However, not all studies found a positive correlation between cohesion and outcome. No significant relationship between cohesion and outcome was reported in a study of 12 short-term time-limited psychodynamic groups for persons with complicated grief, following a loss through death, separation, or both (Kipnes et al., 2002). In this study, two measures of cohesion were completed. One was a measure of cohesion (to group, members, and leader) completed by group members and the other was completed by observers. Correlations between these measures and residual gain scores of two measures of outcome (i.e., psychological symptoms and depression) produced no significant associations. A negative association ($Z = -1.31$) was reported between the proportion of cohesive sessions attended by sex offenders who were on probation and outcome, in terms of re-arrest rates by police in the subsequent year (Roether & Peters, 1972). The greater the proportion of cohesive sessions attended by the sex offenders the greater their re-arrest rate. Therapists rated cohesion using a one-item group-as-a-whole measure. Some difficulties in generalizing the results of this study include the enforced membership in the sex-offender psychotherapy group, which is not typical of other groups. Overall, the findings for cohesion and outcome suggest that there is a strong positive correlation between cohesion and patient improvement, particularly cohesion developed early in therapy (Burlingame et al., 2001). The research also highlights the importance of obtaining both therapist and member perspectives on cohesion.

Alliance

Cohesion has often been identified as the group psychotherapy analogue of alliance in individual psychotherapy (Yalom, 1995). Because of this and the interest of the current study in exploring the connection between cohesion and alliance, it is worthwhile to consider the definitions, development, and research associated with the alliance from the individual psychotherapy literature.

The alliance has been referred to somewhat interchangeably as "therapeutic alliance" (Zetzel, 1956), "working alliance" (Bordin, 1979; Greenson, 1965), "helping alliance" (Luborsky, 1976), or simply as "alliance" (Horvath, Gaston, & Luborsky, 1993). The alliance definition that perhaps gained the most recognition because of its pantheoretical quality was working alliance. This definition was applicable across all types of psychotherapy, recognized the collaborating of both client and therapist in alliance development, and described the real relationship (in contrast to the patient's transference relationship) between client and therapist. Working alliance was defined as client and therapist agreement on the goals of the therapy, agreement on the tasks to be performed to achieve those goals, and the bond that developed between them (Bordin, 1979).

A number of inventories have been developed to measure alliance, but perhaps the most notable are the 19-item revised Helping Alliance Questionnaire (Luborsky et al., 1996) and the 36-item Working Alliance Inventory (Horvath & Greenberg, 1986). Both inventories are based on Bordin's conceptualization of alliance and include client and therapist versions. Demonstrated to be reliable and valid measures of the alliance, the inventories have been frequently used in empirical studies (Rumpold et al., 2005; Sexton, Littauer, Sexton, & Tommeras, 2005).

The concept of the alliance between therapist and client is closely associated with two theories: Carl Rogers' (1957) necessary and sufficient conditions for change and John Bowlby's (1969, 1973, 1980) theory of attachment. Rogers specified therapist conditions that were necessary and sufficient for change, including empathic understanding, positive regard, and congruence. The intention is that the therapist communicates these qualities to the client. These three elements may strengthen the alliance, which in turn may influence the course of therapy. Research partially supported this idea when therapist empathy overlapped with ratings of alliance by 50%, indicating a strong association (Horvath & Greenberg, 1989). Attachment theory is also relevant to the concept of alliance. It revolves around the idea that human beings seek and form attachments to gain security. John Bowlby, who was a student of a major object relations theorist Melanie Klein, described attachment styles as developing in childhood based on responses from the primary caregiver (usually mother) to the child's need. Healthy, secure attachment styles are associated with a child's ability to explore his/her environment and world with confidence; feeling loved and cared for, and with effective regulation of emotions. Four styles of adult attachment have been posited, a secure style as well as three less secure styles, preoccupied, dismissing, and fearful (Bartholomew & Horowitz, 1991).

The therapist is in a position to strengthen the alliance by providing security (e.g., compassion, caring, and respect), in line with Rogers' necessary and sufficient conditions. Patients coming into therapy with less secure attachment styles have more difficulty in developing a strong alliance. There is evidence that patterns of adult attachment relate to the strength of the alliance (Mallinckrodt, Gantt, & Coble, 1995). Study of a similar concept, quality of object relations, shows that higher mature levels exhibited by patients is also related to establishment of the alliance and to favorable outcome (Piper, Joyce, McCallum, Azim, & Ogrodniczuk, 2002). Quality of object relations is a personality characteristic, an enduring pattern of establishing certain types of relationships. Equitable, loving, and tender relationships reflect higher levels of quality of object relations, while intense anxiety and affect relating to loss of or rejection by an object reflect lower levels.

The patient-therapist alliance has been well established empirically, and has been seen as a major contributing factor to successful outcome in individual psychotherapy (Luborsky, 1994; Orlinsky et al., 1994). An extensive meta-analytic review of 79 studies has suggested that the alliance is moderately (overall weighted effect size = .23, *SD* = .20, *N* = 261) but consistently related to outcome (Martin et al., 2000). However, extrapolating the individual psychotherapy findings to group psychotherapy is not as clear due to the complexity of group versus dyadic relationships and the possible overlap between cohesion and alliance. Only a few group psychotherapy studies explore the concept of patient-therapist alliance (Abouguendia, Joyce, Piper, & Ogrodniczuk, 2004) or patient-therapist alliance as separate from cohesion (Marziali, Munroe-Blum, & McCleary, 1997).

Explored next is alliance in group psychotherapy.

Cohesion and Alliance

Two concepts often equated are cohesion from the group psychotherapy literature and alliance from the individual psychotherapy literature. Although often equated, generally alliance measures have not been adapted for group psychotherapy research. The two exceptions are the member-rated Group Alliance Scale (GRAS; Pinsof & Catherall, 1986) and the observer-rated Penn Helping Alliance Rating Scale (PHARS; Morgan, Luborsky, Crits-Christoph, Curtis, & Solomon, 1982; Luborsky, Crits-Christoph, Alexander, Margolis, & Cohen, 1983). Marziali and colleagues (1997) applied the GRAS to group psychotherapy, while the PHARS was modified for group psychotherapy by

Budman and colleagues (1989). Comparison of the unmodified PHARS with five other alliance inventories in the individual psychotherapy literature showed that it was not measuring the same construct as other alliance measures (Tichenor & Hill, 1989). The PHARS was internally consistent with a coefficient alpha of .93 and consistent between raters with intraclass correlation coefficient of .71 (Tichenor & Hill, 1989).

Several types of bonds exist in a group, such as the bond between a member and the therapist, between members, and the bond between a member and the group as a whole. All these bonds contribute to the overall therapeutic relationship. The first investigation of all three aspects in one study revealed that group members use a number of concepts to organize their experience in the group. These concepts are cohesion to the group (mutual stimulation and effect, commitment to the group, and compatibility of the group), perceptions of other participants (positive qualities, personal compatibility, and significance as a group member), and perceptions of the leader (positive qualities, dissatisfaction with the leader's role, and personal compatibility, Piper et al., 1983). These concepts comprise the Cohesion Questionnaire (Piper et al., 1983) and were utilized in subsequent studies to assess different aspects of group cohesion (McCallum et al., 2002). The perceptions of the leader items of the Cohesion Questionnaire resemble a measure of alliance between group member and therapist within a group therapy context.

Another measure of alliance in groups, the Alliance Questions (Piper, McCallum, Joyce, Rosie, & Ogrodniczuk, 2001), was also developed by the same authors to study the relationship between group member and therapist. The items in the perceptions of leader subscale of the Cohesion Questionnaire and the Alliance Questions bear some similarity to items in two "gold standard" measures of alliance used in individual psychotherapy, the Working Alliance Inventory (Horvath & Greenberg, 1986) and the revised Helping Alliance Inventory (Luborsky et al., 1996). Items in common across the four measures are those such as confidence and trust in the therapist, feeling understood by the therapist, liking the therapist, and having useful therapeutic exchanges.

Two group psychotherapy studies investigated the relationship between cohesion and alliance (Budman et al., 1989; Marziali et al., 1997), but each approached the definition of alliance differently. In Budman and colleagues' (1989) study, alliance was defined as the member-to-member interrelationships and the members' experiences of these relationships, as measured by a modified version of the PHARS. Raters observed videotaped sessions and the ratings they completed did not include the relationship between members and the therapist in rating alliance. The same raters rated cohesion using the HCHP-GCS. The definition of cohesion was the functioning of the group as a whole, not simply the individual participants. The findings indicated that the relationship between cohesion and alliance was strong. Related to cohesion and alliance was improvement in self-esteem and reduced symptomatology in members. It is unclear whether it can be concluded that the high positive correlation between cohesion and alliance is because cohesion is the group equivalent of alliance or because rater bias confounded the results. The same raters completed both ratings after viewing a videotaped session segment, which could result in a "halo effect" (i.e., a pervasive general effect which resulted in similar ratings for both cohesion and alliance).

By contrast, Marziali and colleagues (1997) used an integrated therapist-client relationship measure of alliance, the GRAS, and used the GAS to measure cohesion. The study was a randomized controlled trial. It used a manual-guided 30-session interpersonal group psychotherapy treatment for people diagnosed with borderline personality disorder. The GRAS was based on member ratings, and included three levels; the individual alliance of member-to-therapist; the whole system alliance of all members as a group and the therapist; and the subsystem alliance of subgroups and the therapist. It was applied for the first time to group psychotherapy by Marziali and colleagues. The GAS is a member-rated measure of cohesion. It is composed of 12 subscales: Aggression, Submission, Autonomy, Order, Affiliation, Involvement, Insight, Practicality, Spontaneity, Support, Variety, and Clarity. Each subscale comprises 10 true-false items. The GAS successfully discriminated between aspects of the psychosocial environment for three distinct types of therapy groups (Silbergeld et al., 1975). Marziali and colleagues (1997) reported that cohesion and alliance were significantly and positively correlated, but that alliance accounted for more of the variance on the dependent outcome measures of social performance, clinical symptoms, and social dysfunction. This indicated that cohesion and alliance were important, but were capturing different processes within group psychotherapy. A limitation to the study was the small sample size of 17. These two studies (Budman et al., 1989; Marziali et al.) are an interesting first look at cohesion and alliance, but require replication across different types of group psychotherapy approaches.

In one of the few studies relating alliance in group therapy to outcome, patient-therapist alliance in group therapy was found to be a mediating variable between patient expectancy of improvement and outcome (Abouguendia et al., 2004). Patients rated their expectancy before the commencement of therapy and again at the end of therapy. According to theory, the development of a collaborative relationship with the therapist (i.e., alliance) is how patients realize their expectancy regarding outcome. The patients were part of a short-term time-limited psychodynamic group psychotherapy for persons with complicated grief. These results were a replication of findings in individual psychotherapy (Joyce, Ogrodniczuk, Piper, & McCallum, 2003).

If the alliance relates to successful outcome and emerges as a separate entity from cohesion in replications across different types of group psychotherapy approaches, this would assist in the conceptualization and measurement of cohesion and alliance in group therapy. Another element that would assist in this conceptualization is whether there are differences in cohesion, alliance, or outcome attributable to gender of group members.

Explored next are gender differences in group therapy.

Gender Differences in Group Therapy

Although a number of authors have indicated that men and women respond differently to group psychotherapy, research on this issue is virtually non-existent. In mixed groups of men and women, as opposed to same sex groups, men are less aggressive and more self-revealing, while women tend to speak less and decrease their discussion of personal issues. Men are seen to benefit more from mixed groups than women do (Aries, 1976). Women tend to have greater task orientation and less social-emotional orientation in mixed groups than in same sex groups; however the greater determinant of behavior seemed to be gender itself rather than group composition (Piliavin & Martin, 1978). Women's behavior is more social-emotional, while men's behavior is more task-oriented. The number of men and women in a mixed group also plays a role in the behavior of each gender. In a review of five studies the authors indicated that as the number of women in a group increased, gender stereotyping decreased, attitudes towards women improved and greater consideration was given to ideas suggested by women (Wright & Gould, 1996). However, regardless of group composition, gender differences prevail.

Another factor that can affect group participation by men and women is leader style. When group leaders are friendly, self-disclosing, and display affect, men tend to speak more than women do in the group (Wright, 1976). The gender of the group leader also has an effect. When the group leader is a female, group members generate more reactions that are negative. This is more likely to occur if the female leader behaves in a manner that is more stereotypically male, such as being assertive and forceful. Group members self-disclose more with male leaders than with female leaders.

Identification with the leader of the group may also affect outcome. Both male and female group members identify with male leaders, but it is only male group members' identification that affected their outcome (Peters, 1973). It appears as though groups require a leader that can model the values, attitudes, and behaviors with which members can identify.

A recent study was the first to examine outcome differences for men and women with complicated grief in mixed psychodynamic psychotherapy groups (Ogrodniczuk, Piper, & Joyce, 2004). The groups typically consisted of two men and five women. The result was a more favorable outcome in symptoms of avoiding, depression, anxiety, and general distress for women, whereas men were unchanged on these symptoms. Therefore, there is some indication of a differential gender effect for group psychotherapy outcome. The proportion of men and women in the groups may be one explanation for this effect.

In addition to gender differences, it was mentioned earlier that examination of cohesion and alliance in a variety of psychotherapy groups would assist in clarifying these concepts. Of interest in the current study is a particular type of population and psychotherapy group treatment. Discussed next is a syndrome of bereavement, complicated grief, and its treatment by dynamically oriented, short-term group therapy.

Complicated Grief: Syndrome and Treatment

Approximately 219,000 people die in Canada per year (Statistics Canada, 2002, 2003). For each deceased person, usually many family members and friends remain behind mourning their loss. The loss of a loved one to death is a nearly universal experience. It is a significant stressor characterized by sudden turmoil and acute distress. It can lead to major medical and psychological problems. Losing a partner through death is one of the most stressful events of life (Holmes & Rahe, 1967). Widowhood is associated with premature death due to an increased risk for suicide, accidents, and cardiovascular disease. It is also associated with an increased use of alcohol, tobacco, medication, and with an exacerbation of pre-existing medical conditions (Osterweis, Solomon, & Green, 1984). Psychological problems, such as depression and anxiety, are common among the bereaved. About 35% of widows were depressed 1 month after their loss, which declined to about 17% at the 1-year mark. However, about 47% of widows experienced depression at some point during the first year following the death of their partner, compared to about 8% in a non-bereaved control group (Bornstein, Clayton, Halikas, Maurice, & Robins, 1973; Clayton, 1973). Estimates of enduring depression among the bereaved range from 10% to 20% (Bonanno & Kaltman, 2001). The prevalence of depression and medical problems in bereaved individuals is high.

Adjusting to the death of a loved one can be described as alternating between three phases: gradual separation, then acceptance, and finally adaptation to a new reality (Jacobs, 1993). The gradual separation phase involves the initial shock and denial upon hearing the news of the death. The acceptance phase begins with acknowledging the loss, and intensive preoccupation with the loss and high levels of distress are characteristic. The third phase is a gradual assignment of meaning to the loss. Yearning for the person still occurs, but there is a return of optimism and investment in daily life. In a normal grief reaction, individuals feel sad and miss the person, but can acknowledge the death, do not feel extremely lonely, angry, empty or totally shaken by the loss. They would experience a gradual return to capacity, a reinvestment of interest in others and activities, and feel an attenuation of the early distress that they felt. If this does not occur, the individual may be at risk for complicated grief.

Complicated grief, also known as “traumatic,” “pathologic,” “atypical,” “unresolved,” or “neurotic” grief, differs from the normal grief reaction just described. Complicated grief differs by its extreme intensity and its long duration. The symptoms include prolonged intrusive thoughts, yearning, searching, loneliness, purposelessness, numbness, disbelief, meaninglessness, loss of trust, and excessive anger or irritability (Prigerson et al., 1999). There are also associated clinical problems (e.g., anxiety, depression, and hopelessness, Jacobs & Kim, 1990). There is a failure of the person to return to the pre-bereavement level of well being and performance (i.e., the process is not self-limiting). Complicated grief has been shown to be distinct from symptoms of depression, anxiety, post-traumatic stress disorder, and adjustment disorder (Lichtenthal, Cruess, & Prigerson, 2004; Prigerson et al., 1996). It persists over time and continues despite treatment with antidepressants (Pasternak et al., 1991).

Hampered by a lack of standardized definition or diagnostic criteria, not well studied is the prevalence of complicated grief (Marwit, 1996; Prigerson et al., 1999). Currently, Bereavement is listed as a "V" (V62.82) code in the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision (DSM-IV-TR; American Psychiatric Association, 2000) under "Other Conditions that May be a Focus of Clinical Attention." Additionally, Post Traumatic Stress Disorder criteria permits diagnosis following the learning of the death or threat of death of a loved one. These modifications from the previous edition of DSM-IV suggest that there is a growing recognition that grief symptoms may require clinical attention. There is a move to build on this trend by establishing complicated grief as a distinct mental disorder in order to facilitate the treatment of individuals who are affected by this disorder (Lichtenthal et al., 2004). It has been estimated that about 20% of bereaved individuals go on to develop clinical complications (Jacobs, 1993). Of people attending mental health clinics, up to 33% meet or exceed the criteria for complicated grief (Piper, Ogrodniczuk, Azim, & Weideman, 2001).

Having established that complicated grief is a serious condition occurring at a substantial rate, how does it arise? Common belief is that complicated grief originates from conflict in the relationship (Stroebe & Stroebe, 1993), from ambivalence towards the partner (Bowlby, 1980; Horowitz, Bonanno, & Holen, 1993), and from excessive dependence upon the partner (Parkes & Weiss, 1983; Raphael, 1983). However, in the absence of pre-loss data it is not known whether these commonly held beliefs apply to chronically grieved individuals or chronically depressed individuals. In a prospective study, it was suggested that the clearest predictor of complicated grief was excessive dependency, both as a personality trait and dependency upon the conjugal partner (Bonanno et al., 2002). Dependency was also a causal factor in another study of complicated grief (Piper, Ogrodniczuk, Joyce et al., 2001). However contrary to common belief, ambivalence in the relationship did not have a negative impact on grief symptoms (Piper, Ogrodniczuk, Joyce et al., 2001).

Group intervention is one means of assistance for individuals with complicated grief. Unfortunately, the few early systematic studies that were available were not definitive in answering the question of whether group intervention methods were effective (Piper, McCallum, & Azim, 1992; Piper & McCallum, 1991). Controlled trials in the literature were rare. In a meta-analysis of 35 studies (*N* = 2,284) a moderate effect size was obtained (weighted average = .43). The authors concluded that the effect size was related to the nature of the studies (i.e., self-selected versus recruited clients) rather than to the effectiveness of grief therapy (Allumbaugh & Hoyt, 1999). Their review suggested that the most effective interventions were those with self-selected clients beginning therapy within a few months of the loss. A number of weaknesses in study design make it difficult to ascertain the effectiveness of group treatment. Common weaknesses were small sample size, a well-functioning patient population that presented little room for change, and a variety of possible confounding variables.

Some authors attempted to address these design weaknesses. A controlled clinical trial was conducted to investigate the effectiveness of short-term time-limited psychodynamic group psychotherapy for persons experiencing loss through separation, divorce or death (McCallum & Piper, 1990; McCallum, Piper, Azim, & Lakoff, 1991; Piper & McCallum, 1991). The design involved a pre- and post-test (*N* = 79 patients), matching on psychological mindedness, gender, and age and then random assignment to treatment or a wait-list control group. The results indicated that the treatment group improved significantly relative to the control group on variables of relevance, such as depression, self-esteem, and the intrusion and avoidance of thoughts of the lost person(s). Patients maintained their treatment gains 6 months later at follow-up. The results supported the efficacy of short-term psychodynamic group psychotherapy for this population.

A subsequent study of complicated grief investigated the interaction of two personality characteristics (quality of object relations and psychological mindedness) and two forms of psychodynamic group psychotherapy (supportive and interpretive; Piper, McCallum et al., 2001). Patients improved in both supportive and interpretive therapy. For grief symptom improvement, high quality of object relation patients improved more in interpretive therapy and low quality of object relation patients improved more in supportive therapy. High psychologically minded patients improved in both supportive and interpretive therapy. For general symptom improvement, clinical significance was greater in interpretive over supportive therapy.

The authors also investigated other patient variables, such as affect and social support, for their possible contribution to therapeutic success. High quality of object relation patients in interpretive therapy achieved a greater balance in the expression of both positive and negative affect (i.e., emotional regulation). This was found to be a significant mediating variable in successful outcome (Piper, Ogrodniczuk, McCallum, Joyce, & Rosie, 2003). Achieving this balance of affect in therapy is beneficial as it may facilitate examination of uncomfortable emotions as well as promote interpersonal exchange between patients. Perceived social support from friends was positively correlated with improvement, whereas support from family was negatively correlated with improvement (Ogrodniczuk, Piper, Joyce, McCallum, & Rosie, 2002). This finding highlights the need for therapists to assess the patients' perceived support system and expectations for support to intervene appropriately. The data support the efficacy of group therapy and add to the understanding of which factors contribute to success, such as patient characteristics and social support.

The authors of these studies identified a number of characteristics of psychodynamic group psychotherapy and the structure of the groups believed to contribute to success (McCallum et al., 1991). Key characteristics include homogeneous group composition, utilization of transference phenomena, the reaction of the patients to an absent member by therapists in their interpretations, and the rapid establishment of cohesion early in the group. The group format allows patients to meet some of their dependency needs, diffuses some of the anxiety and frustration surrounding therapist interventions, and the time-limited format promotes rehearsal of adaptive reactions to loss. Patients experience the unresolved conflicts associated with previous losses and are enabled to work through them in the here and now of events such as group termination. According to psychoanalytic theory, obstacles to the resolution of the normal mourning process are due to an exacerbation of unconscious conflicts. Therapy provides the forum to identify and discover adaptive resolutions to these conflicts. The evidence thus supports the efficacy of group treatment for persons with complicated grief, making these groups a useful framework for studying the effects of process variables such as cohesion and alliance on outcome.

Improvement Over Previous Research

The current study design was an improvement over previous cohesion research in a number of ways. First, it afforded a unique opportunity to study cohesion and alliance at the same time; therefore, examining their interrelationships and their relationship to outcome. Second, it provided an opportunity to study cohesion and alliance, using the same measures, from three different perspectives (patient, therapist, and observer). Previous research typically studied only one perspective, usually the patient perspective. Third, cohesion and alliance measured over three phases of therapy (beginning, middle, and termination), as a function of two treatment conditions (supportive and interpretive therapy) and patient gender also afforded a new opportunity. This allowed for examination of any changes in pattern for cohesion and alliance. In previous research usually only post-therapy measures were taken. Fourth, administration of pre-therapy, post-therapy, and 6-month follow-up outcome measures made it possible to investigate whether cohesion and alliance predicted outcome. Fifth, 99 participants in 18 groups represented a large sample size for psychotherapy research, larger than in previous studies. The current study thus improved on previous work by utilising a larger sample size, incorporating ratings from multiple perspectives on the same measure, rating three phases of therapy, and using both alliance and cohesion measures. Form of treatment (i.e., supportive and interpretive therapy) and patient gender represented important independent variables. All these elements in one study made this design unique.

The Current Study

The introduction has highlighted a number of important observations regarding group therapy, cohesion, alliance, gender differences, and complicated grief. The current study design addressed a number of the methodological shortcomings previously identified in the literature and set out to investigate areas that are currently limited in research knowledge.

The current study investigated the effects of cohesion and alliance (as rated by observer, patient, and therapist) at three stages of therapy (beginning, middle, and termination) on patient outcome (measured at pre-therapy, post-therapy, and 6-months follow-up). The independent variables were patient gender and type of group psychotherapy (supportive and interpretive). The definition of cohesion was the bond between group members and measured for the group as a whole (excluding the therapist). The definition of alliance was the bonds between individual group members and the therapist. However, for the observer perspective, alliance ratings were completed for the group as a whole rather than for individual patients. Characteristics of the therapist, such as gender, and relationship to process and outcome were not explored due to the small number of therapists ($N = 3$) who were involved in the study.

Research Hypotheses

Seven research hypotheses and their rationale are discussed. First, it was predicted that alliance ratings from three perspectives (observer, patient, and therapist) would be significantly and positively correlated. Second, cohesion ratings from these three perspectives would also be significantly and positively correlated. The rationale for these first two hypotheses was that there was generally little literature support for predicting differences in ratings among perspectives. One study did find a difference in ratings. In an early study of 10 approaches to encounter groups, ratings of group benefit from four perspectives (self, leader, co-participants, and social network) were found to be unrelated (Lieberman, Yalom, & Miles, 1973). However, if alliance and cohesion are observable, measurable constructs, then presumably there would be considerable overlap between ratings from the three perspectives as predicted.

The third hypothesis was cohesion and alliance measures would be significantly and positively correlated. Most of the group psychotherapy literature makes little distinction between cohesion and alliance. Even in the multidimensional models, the alliance (i.e., relationship between patient and therapist) was defined as part of cohesion, one of many relationship dimensions in a group. Marziali and colleagues (1997) reported that alliance and cohesion were significantly and positively correlated. Therefore, it was predicted that cohesion and alliance in the current study would be significantly and positively correlated.

The fourth hypothesis was the relationship between cohesion and alliance in the beginning phase of therapy would be higher than at the middle or termination phases of therapy. There was evidence that cohesion developed rapidly in the beginning phase of therapy and if cohesion and alliance were linked then it was expected that both would be higher at that time compared to later in therapy.

The fifth hypothesis was alliance would be a better predictor of benefit at post-therapy than cohesion. Although there was evidence for a link between cohesion and outcome, alliance was expected to be a better predictor of outcome. This was expected in view of the strong individual psychotherapy research literature that links the alliance to outcome and Marziali and colleagues' (1997) group psychotherapy study where alliance accounted for more of the outcome variance than did cohesion.

The sixth hypothesis was men and women's alliance ratings would not be significantly different, although it was expected that group therapy outcome benefit would be greater for women than for men. The literature gives little guidance for whether men and women rate the alliance differently. Factors that may influence this are the ratios of men to women in the group and the gender of the therapist. In view of this, no difference was expected. However, it was expected that women would show greater outcome benefit than men. This was based on Ogrodniczuk and colleagues' (2004) findings with the same population as the current study that women had greater symptom improvement.

The seventh and final hypothesis was that patients in both interpretive and supportive therapy groups would improve, but that alliance and cohesion would be rated higher in supportive therapy. Piper, McCallum, and colleagues (2001), studying the same population as the current study, found improved outcome with both supportive and interpretive therapy. However, due to the more interactive nature of supportive therapy over interpretive therapy it was predicted to have higher cohesion and alliance ratings.

METHOD

Setting

The current study occurred within a trial of treatment for complicated grief, conducted at an outpatient psychiatry clinic, the Psychiatric Treatment Clinic, in Edmonton, Alberta. The clinic is located within the University of Alberta Hospital, a 600-bed university-based general hospital, and is part of a large integrated, multifaceted psychiatric service, which includes inpatient psychiatry beds within the same general hospital. Completed annually at the Psychiatric Treatment Clinic are about 1,800 assessments, with about 18% of these assessments resulting in referrals to psychodynamic psychotherapy, including individual, couples, or group.

Context

The parent study of complicated grief was a randomized clinical trial of two forms of treatment (supportive and interpretive) utilizing short-term, time-limited, psychodynamically-oriented groups (STPG). Also studied were the interaction of treatment with two patient personality variables (quality of object relations and psychological mindedness, Piper, McCallum et al., 2001). The participants recruited for the parent study were patients from the Psychiatric Treatment Clinic. Excluded patients were those not able to participate in a group therapy format due to conditions such as organic brain disorders, or if they had a condition that required urgent treatment, such as severe depression or suicidal symptoms. Initial study eligibility was determined at the time of intake assessment. Eligible patients received an in-depth second interview focusing on complicated grief issues. If complicated grief appeared to be an issue, then a third interview determined whether the patient met study criteria for complicated grief. Criteria were met if patients scored 10 or higher on one of three grief measures and at least 2.0 on a social adjustment measure. The three grief measures were Complicated Grief Factor items (Prigerson et al., 1995), and the Intrusion and Avoidance subscales of the Impact of Events Scale (Horowitz, Wilner, & Alvarez, 1979). Patients needed to obtain a score of at least 2.0 on one of the six subscales of the Social Adjustment Scale-Self Report (Weissman & Bothwell, 1976). Patient matching occurred after meeting inclusion criteria and providing informed consent. Investigators matched patients in pairs based on personality characteristics (quality of object relations and psychological mindedness), use of medication, and when possible, gender and age. Patient random assignment, after matching, was to one of two STPG, either supportive or interpretive in approach.

Statistical analysis of the supportive and interpretive groups in the parent study showed that there were no significant differences between the groups in the initial use of medication or pattern of medication use during therapy. Nor were any differences seen in outcome measures between patients who were prescribed therapeutic dosages of psychotropic medication and those who were not (Piper, McCallum et al., 2001).

Participants

In the parent study of complicated grief, investigators assigned patients to 16 groups, over a span of about 3 years, from 1996 to 1999 (Piper, McCallum et al., 2001). Subsequently conducted were two additional STPG groups, using the same parameters as the original 16 groups. Data utilized in the current study combined these 2 groups with the original 16 groups.

For all 18 STPG groups, 207 patients were referred to the study from the Psychiatric Treatment Clinic, but 53 (25.6%) did not complete the pre-therapy assessments and therefore did not proceed to therapy. Of the remaining 154 patients who began therapy in STPG, 34 (22.1%) did not attend at least 8 of the 12 therapy sessions and were considered to have dropped out of therapy. The remaining 120 patients completed STPG, 60 patients in supportive therapy and 60 patients in interpretive therapy.

Missing Data

The 120 patients from all 18 groups who completed therapy constituted the sample for the current study. However, a proportion did not complete some of the pre-therapy measures or post-therapy measures, or missed completing some of the process measures. Cases in which a substantial amount of data were missing were eliminated. The criterion for eliminating a case was if more than 8 of the 15 outcome measures were missing at pre-therapy or at post-therapy; or if two or more of Sessions 4, 8, or 12 were missing for any of the process measures (cohesion or alliance ratings). Application of this criterion eliminated data for 21 patients, which reduced the 120 to a final sample of 99 patients. About 64% of the sample, or 63 of the 99 patients, had no missing data. Of the cohesion and alliance ratings at the three phases of therapy, 2.24% of the data were missing.

For the 15 pre-therapy outcome variables, 4 of 99 patients had a total of four missing variables (0.27% missing). Estimating the values for these four missing variables was accomplished by regression analysis of the 15 pre-therapy variables. Regression model equations were developed for each missing variable. For the 15 post-therapy outcome variables, 7 of 99 patients had a total of 11 missing variables (0.74% missing). Estimating the values for these 11 missing variables was accomplished by regression analysis of the 15 post-therapy variables. Unfortunately, at 6-month follow-up, only 65 of the 99 patients (66%) had completed the 14 therapy outcome measures. However, of those 65 patients only 1 patient had 1 item missing (0.11% missing).

The number of patients required to satisfy power specifications was estimated to be 83, using a medium critical effect size ($r = .30$), power of 80%, and alpha equal to the 5% level in a two-tailed test (Kraemer & Thiemann, 1987). The final sample of 99 was therefore sufficient to correctly detect a significant process-outcome relationship (i.e., adequate power). The smaller follow-up sample of 65, using the same parameters (medium critical effect size of $r = .30$ and an alpha of 5% in a two-tailed test) yielded a power of approximately 70%. Although the power decreased with the smaller sample size, 70% is within the generally accepted power range (Kraemer & Thiemann, 1987).

Demographic and Diagnostic Information

The final sample of 99 patients was described by age, gender, marital status, current employment status, highest education achieved, and diagnosis. Diagnosis was according to the revised third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R; American Psychiatric Association, 1987). Detailed demographics will follow, but this sample of 99 patients could be generally described as middle-aged women with high school or post-secondary education, who were married/common-law and likely to be employed. The majority of the patients had a major depressive disorder and in addition, some had dependent personality disorder and other medical conditions. Most of the patients had problems with their primary support group. Their global assessment of functioning was in the moderate range.

The demographic characteristics of the sample in total and for men and women are in Table 1. The average age of the 99 patients was 44.3 years (*SD* = 10.9, range = 19 to 67), with the highest proportion (35.4%) in their 40s, followed by those in their 50s (24.2%) and then by those in their 30s. Most of the sample were women (79.8%), and the highest proportion of the sample were either married/common-law (40.4%) or separated/divorced (28.3%). About one-half of the sample was employed either full-time or part-time, but also a substantial proportion were unemployed. The highest educational level achieved for about one-half of the sample was post-secondary and nearly all of the remainder of the sample completed grades 10, 11, or 12. Comparing men and women across the demographic variables indicated similar proportional representation (see Table 1). The average age for men was 45.5 years (*SD* = 11.0, range = 23 to 63), which was also similar to the average age for women at 44.0 years (*SD* = 10.9, range = 19 to 67).

Diagnostic information for men and women and the total sample are in Tables 2 and 3. Axis I diagnostic information was obtained through the computer-administered Mini-Structured Clinical Interview for DSM-III-R (First, Gibbon, Williams, & Spitzer, 1990). Independent assessment validation of these diagnoses occurred on the day of intake by the intake assessor and a staff psychiatrist. Most of the patients (73.7%) were diagnosed with an Axis I clinical disorder primary diagnosis of major depressive disorder. This was true for both men and women in the sample (see Table 2).

Patients provided Axis II diagnostic information by completing the computer-administered Structured Clinical Interview for DSM-III-R Personality Questionnaire and the Auto-Structured Clinical Interview for DSM-III-R (First, Gibbon, Williams, & Spitzer, 1991). Calculations of rater reliability used nine randomly selected cases and three raters. Kappa value calculations for each pair of raters and for each disorder resulted in an average kappa value = .95 for all pairs and disorders (Piper, McCallum et al., 2001). About two thirds of the patients did not have an Axis II personality disorders primary diagnosis, but the most prominent Axis II diagnosis that did occur was dependent personality disorder (15.2%). A diagnosis of dependent personality disorder only occurred for women (see Table 2).

About one fifth of the patients also had an Axis III general medical condition, with diseases such as hypothyroidism, diabetes, hypertension, asthma, Cushing's disease, cluster headaches, atypical face pain, Bell's palsy, carpal tunnel, gastric ulcer, and arthritis (see Table 3). Similar proportions of men and women had a general medical condition. Nearly all of the patients had Axis IV psychosocial and environmental problems. The highest proportion, at nearly two thirds of the patients, had problems with their primary support group. By definition, these included problems such as death of a family member, health problems in the family, disruption of the family by separation, divorce or estrangement, and sexual or physical abuse. A greater proportion of men (85%) than women (58%) had a primary support problem. Occupational problems were the next highest in proportion and included problems such as unemployment, threatened job loss, and discord with boss or co-workers. Their average Axis V global assessment of functioning was 57.3 (*SD* = 8.6, range = 20 – 80), which is in the moderate symptoms or moderate difficulty in social, occupational or school functioning category. The largest proportion of the sample (48.5%), was in the moderate Axis V category (code of 51 to 60). The remainder were either in the serious symptoms or impairment category (21.2%; code of 41 to 50) or in the some mild symptoms or mild difficulty but functioning well category (24.3%; code of 61 to 70). The average Axis V functioning was similar for women and men (*M* = 57.5, *SD* = 8.8, range = 20 – 80; *M* = 56.3, *SD* = 8.1, range = 40 – 75; respectively).

Therapists

Three qualified and experienced therapists conducted the supportive and interpretive STPG sessions in the parent study of complicated grief. One therapist was a 40-year-old male psychologist. Two therapists were female, a 41-year-old social worker, and a 40-year-old occupational therapist. All therapists had between 10 and 14 years of experience practicing group therapy. Each therapist conducted an equal number of groups, a total of six groups each, three of which were supportive and three interpretive.

Short-term Time-limited Psychodynamically-oriented Groups

Patients in both forms of STPG met for 90 minutes, once per week, for 12 weeks. Each group had approximately eight patients; each group was conducted by one therapist. Eighteen groups, 9 supportive and 9 interpretive, were conducted. The 18 groups were conducted in pairs, such that a supportive and an interpretive STPG were conducted by the same therapist within the same 12-week time frame (i.e., the pairs were synchronous). The average proportion of women in each group was higher than the proportion of men (*M* = 76.91%, 23.09%, respectively, *SD* = 13.73%). The proportion of women in each group ranged from 44.4% to 100.0%. There were approximately five women and two men per group.

To ensure integrity of treatment approach, therapists followed technical manuals for supportive (McCallum, Piper, Joyce, & Members of the Short-term Group Psychotherapy Seminar, 1995) and interpretive (Piper, McCallum, Joyce, & Members of the Short-term Group Psychotherapy Seminar, 1995) approaches. Measurement of adherence to technique showed that the two types of therapy differentiated according to manual descriptions (Piper, McCallum et al., 2001). The supportive and interpretive therapies had similar structures, but the objectives and therapist technique differed between the two therapies.

Supportive Group Psychotherapy

The objectives of the therapist in the psychodynamically oriented supportive approach are to improve and reinforce the patients' adaptation in their life situation, and teach problem-solving skills. The therapist seeks to support the patient's ego functioning, and uses a psychodynamic framework of interpretation of unconscious phenomenon to determine what to support and when (Doidge & Freebury, 1998). The therapist attempts to create an environment of acceptance where patients can share common experiences and feelings and receive support for making changes. The therapist techniques include gratification, non-interpretive interventions, providing guidance, engaging in problem-solving strategies, externalizing responsibility for problems, praising, and disclosing personal information, opinions, and values. These groups are based on the notion that providing support will improve symptomatic and role functioning and that with this improvement the natural grieving process will resume and continue until its resolution (McCallum et al., 1995).

Interpretive Group Psychotherapy

The underlying assumption of the psychodynamically oriented interpretive approach is that understanding and resolving unconscious conflicts that underlie complicated grief can overcome barriers to resolution of the grief process. Therapists encourage patients to self-reflect and in doing so to understand their thoughts, feelings, and behaviors and to achieve mature autonomy (Doidge & Freebury, 1998). To enable patients to experience conflict within the group, the therapist attempts to create an environment of mild tension and deprivation. The main objective is to enhance the patients' insight into conflicts that underlie and sustain their problems. The therapists' techniques include maintaining pressure on patients to talk, encouraging the exploration of uncomfortable emotions, and making interpretations about conflicts. The therapist directs patients' attention to their subjective impressions of the therapist, makes links between their relationships with the therapist, each other, and others in their lives. The focus is on the here-and-now treatment setting and directing attention to their subjective impression of others in their lives (Piper et al., 1995).

Process Measures

The investigators in the parent study of complicated grief employed a number of process measures. Of interest in the current study were three of the group psychotherapy process measures: Group Climate Questionnaire-Short Form (GCQ-S: MacKenzie, 1983), Alliance Questions (AQ: Piper, McCallum et al., 2001), and the Member-to-Leader Bond Scale (MLBS: Piper et al., 1983). Research assistants administered the GCQ-S and AQ to patients and therapists, and administered the MLBS to patients. All measures were administered three times, at the end of each third of therapy (i.e., after Sessions 4, 8, and 12, corresponding to the beginning, middle, and termination phases of therapy). Session 12 was the last therapy session.

Group Climate Questionnaire-Short Form (GCQ-S)

Group-as-a-whole cohesion was measured using patient and therapist ratings on the GCQ-S (MacKenzie, 1983). The GCQ-S is a 12-item measure with each item rated on a 7-point Likert scale, ranging from 0 = "not at all" to 6 = "extremely." There are three subscales, which are relatively independent: Engaged (comprising five items), Conflict (comprising four items), and Avoiding (comprising three items). The coefficient alphas for the Engaged, Avoiding, and Conflict subscales are .94, .92, and .88, respectively (Kivlighan & Goldfine, 1991). It had been reported in previous analysis for the parent study of complicated grief that only the Engaged subscale was significantly related to outcome (Ogrodniczuk & Piper, 2003). The Engaged subscale items are those that would be rated highly in a positive working climate and together closely reflect the concept of cohesion (MacKenzie, 1998). Thus, only the Engaged subscale was employed in the current study. As part of the Engaged subscale, respondents rated the group's expressions of positive regard for one another, the group's attempts to understand one another and the psychological processes within the group, and personal disclosure within the group. They also rated active group involvement, whether the group addressed highly relevant issues, and whether members challenged each other in the work of the group. The GCQ-S is widely used in the literature across a variety of types of groups (Joyce & Kwong, 2001).

Alliance Questions (AQ)

The alliance between each patient in the group and the therapist was represented by AQ ratings. The authors developed the AQ measure and used it in their studies of complicated grief (Piper, McCallum et al., 2001). Patients rated their own alliance with the therapist and the therapist independently rated his or her alliance with each patient. The AQ measure instructed both patients and therapists to base their ratings on "today's session." The AQ comprises four questions each rated on a 6-point scale, with the first point labeled "very little" and the last point labeled "very much," and no points labeled between. Respondents rate the opportunity in the group for the patient to express important issues and the relevance of the session in helping the patient to address his or her difficulties. They also rate whether the therapist was able to relate to the patient and the ability of the patient to grasp the responses from the therapist and work with these responses in the group. Cronbach's alpha was .97 for the patient-rated alliance and .96 for the therapist-rated alliance (Ogrodniczuk & Piper, 1999).

Member-Leader Bond Scale (MLBS)

The third process measure, MLBS (Piper et al., 1983) is also a measure of the alliance (i.e., bond) between patients and therapist; however, only patients complete these ratings. This measure was originally one scale of a three-part measure of cohesion, also referred to as the Cohesion Questionnaire (McCallum et al., 2002). This measure best approximates the alliance; it reflects the patient's perception of the person of the therapist. The MLBS is a 9-item, 6-point rating measure, with only the first and last points labeled. The first point is "very little" and the last point is "very much." The MLBS has three subscales, each containing three items: Positive Qualities, Dissatisfaction, and Compatibility. The Positive Qualities subscale items can be described as asking patients how much they trust, value, and like their therapist. The Dissatisfaction subscale items explore if there is enough therapist expression of feelings, whether patients would like the therapist to speak more often in the group, and whether the therapist gives sufficient attention to needs. The Compatibility subscale items ask about the desire of patients to get to know their therapist outside of the group setting, how much patients express knowledge of what the therapist is like, and how much patients feel connected or akin to the therapist. Cronbach's alpha for the Positive Qualities, Compatibility, and Dissatisfaction subscales are .81, .69, and .77, respectively (McCallum et al., 2002).

Outcome Measures

Fourteen measures that covered 15 variables were used in the parent study of complicated grief to assess therapeutic outcome (Piper, McCallum et al., 2001). These patient self-report measures covered grief symptoms, psychiatric symptoms, self-esteem, social role functioning, life satisfaction, physical functioning, and interpersonal distress. Patients, therapists, and independent assessors rated severity of distress associated with individualized target objectives. In the current study, target objective ratings by therapists were not available for the 6-month follow-up period. Therefore, instead of 14 outcome measures (15 variables), as utilized in the parent study, the current study used 13 outcome measures (14 variables). Research assistants administered these measures to patients at pre-therapy, at termination of therapy, and at 6-month follow-up. For each measure an overall score was calculated, unless otherwise noted in the following descriptions of the measures.

Brief Symptom Inventory-Global Severity Index (BSI-GSI)

The Brief Symptom Inventory (Derogatis, 1993; Derogatis & Melisaratos, 1983) is a measure of psychological symptom status, designed primarily for use with psychiatric and medical patients. It is a 53-item self-report measure. Each item is rated on a 5-point scale of distress, ranging from 0 = “not at all” to 4 = “extremely.” There are nine primary symptom subscales: Somatization, Obsessive-compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. There are also three global indices of distress: Global Severity Index (GSI), Positive Symptom Distress Index (PSDI), and Positive Symptom Total (PST). The GSI was the indicator used in the current study. It combines information on the numbers of symptoms and the intensity of perceived distress and is the best single measure of current levels of distress.

The Brief Symptom Inventory was derived from a larger inventory, the Symptom Checklist-90-Revised, and was found to be a suitable short-form substitute (Derogatis & Melisaratos, 1983). The internal consistency, Cronbach's alpha, in a sample of 1,002 outpatients, for the nine subscales ranged from .71 for Psychoticism to .85 for Depression. The 2-week test-retest reliability for a group of 60 non-patients ranged from a low of .68 for Somatization to a high of .91 for Phobic Anxiety (Smith, 1996). The 2-week test-retest reliability for the three global indices was .90 for the GSI, .87 for the PSDI, and .80 for the PST. There was evidence for convergent validity with similar subscales on the Minnesota Multiphasic Personality Inventory and construct validity based on factor analytic studies of internal structure.

Beck Depression Inventory (BDI)

The BDI (Beck & Steer, 1987) measures the intensity of depression. It is a 21-item self-report inventory, each item responded to from 0 to 3 in terms of intensity. The items address mood, pessimism, sense of failure, lack of satisfaction, guilt feelings, sense of punishment, self-dislike, self-accusation, suicidal wishes, crying, irritability, social withdrawal, indecisiveness, distortion of body image, work inhibition, sleep disturbance, fatigue, loss of appetite, weight loss, somatic preoccupation, and loss of libido. Ten studies reported test-retest reliability of the BDI. Administration periods ranged from 1 hour to 4 months. The correlation coefficients ranged from .48 to .86 for the psychiatric population sample and from .60 to .83 for the non-psychiatric population sample (Beck, Steer, & Garbin, 1988). Nine studies measured internal consistency for psychiatric population samples; an average coefficient alpha of .86, ranging from .76 to .95. Fifteen studies measured internal consistency for non-psychiatric population samples; an average coefficient alpha of .81, ranging from .73 to .92 (Beck et al., 1988).

Trait Anxiety Scale (TAS)

The TAS (Spielberger, 1983) was designed to tap individual differences in anxiety proneness. High trait anxiety refers to a stable tendency or disposition for individuals to perceive a wide range of situations as stressful, dangerous or threatening and therefore respond with high acute anxiety in those situations (Gaudry & Spielberger, 1971). The TAS consists of 20 self-report items, responded to on a Likert scale of 1 = "almost never," to 4 = "almost always." Respondents select the response that indicates how they generally feel, and includes statements such as I feel restless, or nervous, or a failure, or I am calm, happy, or content. Internal consistency estimates ranged from .89 to .91 and test-retest reliability, using a sample of high school and college students, ranged from .65 to .86 (Ogles, Lambert, & Masters, 1996).

Short Form-36 Health Survey-Physical Functioning (SF-36-PF)

The Short Form-36 Health Survey (Medical Outcomes Trust, 1994) is a subjective measure of health and was designed for use across a wide range of illness groups as well as the general population. It was developed to guide policy decision-making by examining health payment systems in the United States and the use of health services (Wright, 1994). The Short Form-36 Health Survey measures functioning, well being, overall health, and change in health status using nine domains. The nine domains are Physical Functioning, Social Functioning, Role Functioning-Physical, Role Functioning-Mental, Mental Health, Energy/Fatigue, Pain, General Health Perceptions, and Change in Health. Internal reliability coefficients for the domains, calculated for general population groups, ranged from .76 for Social Functioning to .90 for Physical Functioning (Jenkinson, Coulter, & Wright, 1993). Using a randomly selected general practice sample of 1,980 patients, ranging in age from 16 to 74, the 2-week test-retest reliability correlation coefficients ranged from .63 for Role Functioning-Mental to .81 for Physical Functioning. (Brazier et al., 1992).

Of interest in the parent study of complicated grief was the Physical Functioning domain. The 10 activities in this domain include strenuous ones such as running, lifting, or sports, and moderate ones such as bowling. Questions about everyday activities, such as carrying groceries, climbing stairs, walking specified distances, and self-care were also covered. Respondents were asked to rate their limitations in performing these activities on a 3-point scale, from 0 = "yes, limited a lot" to 2 = "no, not limited at all."

Complicated Grief Factor (CGF)

Investigators developed the CGF (Prigerson et al., 1995) as an attempt to distinguish complicated grief from bereavement-related depression. The authors used items from a number of depression and bereavement measures. A principal components analysis revealed two factors, one of which was the CGF. The CGF consists of seven self-report items, with a 4-point Likert scale of frequency of occurrence in the past week, from 0 = "never or rarely" to 3 = "very often." The items include patient ratings of yearning for the deceased person to return, preoccupied thoughts, frequency of crying, experience of disbelief or being dazed over the event, or returning to places or things related to the deceased. The internal consistency reliability estimate of the CGF was .76 in a sample of 82 widows or widowers with no previous psychiatric disorder.

Impact of Events Scale (IES)

The IES (Horowitz et al., 1979) assesses psychological responses to distressing or stressful life events. Administration of the IES is useful for pre-psychotherapy assessment. During the development of the IES, the authors found that the manifestation of distress was similar across a variety of stressful life events, including but not limited to bereavement. The measure is comprised of 15 items, 7 items representing the Intrusion subscale and 8 items representing the Avoidance subscale. Each item is a self-report rating of the frequency of occurrence in the past 7 days, using a 4-point scale 0 = "not at all" to 3 = "often." Items in the Intrusion subscale included statements about unbidden thoughts or images, recurring dreams, waves of feelings, and difficulty sleeping due to images or thoughts about the event. Items in the Avoidance subscale included statements about an active attempt to suppress feelings, memories, thoughts, denying the meaning of the event, and emotional awareness of numbness concerning the event. The 1-week test-retest reliability, using a class of 25 physical therapy students, was .89 for the Intrusion subscale and .79 for the Avoidance subscale. Internal consistency, using Cronbach's alpha, was .78 for Intrusion and .82 for Avoidance. The IES-Intrusion subscale and the IES-Avoidance subscale appear in the parent study of complicated grief as separate scores, rather than one score for the IES as a whole. Therefore, the IES consisted of two variables: IES-Intrusion and IES-Avoidance.

Texas Revised Inventory of Grief-Present Feelings (TRIG-P)

The Texas Revised Inventory of Grief (Faschingbauer, Zisook, & DeVaul, 1987) is a means of systematically measuring complicated grief. It is a common measure in studies of various bereaved populations. The Texas Revised Inventory of Grief consists of 21 self-report statements responded to on a 5-point scale from "completely true" to "completely false." The statements divide into two subscales. The first subscale (8 statements) relates to Past Feelings, which is the period immediately after the loss. The second subscale (13 statements) relates to Present Feelings about the person's death. These include statements such as still crying or still being upset when thinking about the deceased, experiencing emotional pain when recalling the past, often thinking about or always reminded about the deceased person, and having difficulty accepting the person's death. Internal consistency in a sample of 260 United States citizens who lost a loved one to death was .74 for the Past Feelings subscale and .88 for the Present Feelings subscale. Test-retest reliability was .77 for Past Feelings and .86 for Present Feelings. In the parent study of complicated grief and for the current study, only the Present Feelings subscale was completed.

Inventory of Interpersonal Problems (IIP)

The IIP (Horowitz, Rosenberg, Baer, Ureño, & Villaseñor, 1988) measures the degree of distress that people experience arising from interpersonal difficulties that they have identified. Designed especially for use in dynamic psychotherapy, the IIP serves to identify the problems that people bring to therapy and to ascertain the degree to which the problem had resolved after therapy. The IIP self-report inventory has 64 items, which are rated on a 5-point Likert scale of 0 = "not at all" to 4 = "extremely." The first 39 items are "things that you find hard to do with other people," such as feeling close, forgiving, and getting along. The remaining 25 items are "things that you do too much," such as arguing, pleasing, and controlling. A sample of 103 outpatient clients constituted the normative data. The IIP has six subscales (Assertive, Sociable, Intimate, Submissive, Responsive, and Controlling) and the estimates of internal consistency using coefficient alphas ranged from .82 to .94. The test-retest reliability correlation coefficients at 10 weeks on a waiting list ranged from .80 to .87 for the subscales and .98 for the overall inventory score (Horowitz et al., 1988). Used in the current study, the overall inventory score represents severity of interpersonal distress.

Social Adjustment Scale Self-Report (SAS)

The SAS (Weissman & Bothwell, 1976) measures the level of functioning in different areas of life, looking at performance at expected tasks, amount of friction with others, interpersonal relations, inner feelings, and satisfaction. The SAS has 54 questions, divided into areas of work (for pay, as homemaker, or student), spare time, extended family relationships, relationships with a partner and children, the family unit, and financial. Respondents rate each question based on events over the last 2 weeks, using a 5-point scale. A score of 1 on the scale indicates no or little impairment while a score of 5 indicates the most impairment. The current study used the Global Social Functioning score. Test-retest reliability correlation coefficients for the items ranged from .33 to .97, with a mean of about .83 (Auerbach, 1983).

Rosenberg Self-Esteem Scale (RSE)

The RSE (Rosenberg, 1979) was developed to study the thoughts and feelings that individuals have about self when being asked to "stand outside of self" and make an assessment (i.e., self-concept). The RSE is a self-report scale consisting of 10 items. The items include assessments about self and satisfaction, worth, respect, failure, attitude, ability, and good qualities. Respondents rate themselves on each item, using a 4-point scale, which ranges from "strongly agree" to "strongly disagree." The coefficients of reproducibility and scalability were 92% and 72%, respectively. The 2-week test-retest reliability in a small sample of college students was .85.

Life Satisfaction (LS)

A self-report of LS was made on a 7-point Likert scale, ranging from 1 = "completely dissatisfied" to 7 = "completely satisfied." A single item asked patients to rate their present experience of life as a whole.

Target Objectives Severity-Independent Assessor (TOS-IA)

During an interview, as part of the parent study of complicated grief, patients identified three objectives. These objectives were problems that patients sought help with from group psychotherapy treatment. The problems associated with these objectives were then rated on a 5-point Likert scale of severity of distress, ranging from 1 = "slight severity" to 5 = "extreme severity." Ratings were completed by independent assessors (bachelor's level research assistants) and then averaged for the three objectives. Two-rater interrater reliability was calculated involving six raters and 12 cases. The resulting average intraclass correlation coefficient [ICC (2,1)] was .96 (Piper, McCallum et al., 2001).

Target Objectives Severity-Patient (TOS-P)

The patients also rated the severity of distress associated with their own three objectives. The patients used the same 5-point Likert scale of severity, which ranged from slight to extreme severity. The three ratings of severity were averaged for each patient.

Factor Analytic Studies of Outcome Measures

In the parent study of complicated grief (Piper, McCallum et al., 2001), a principal components analysis with orthogonal rotation of residual change scores from pre- to post therapy for 15 outcome variables was reported. The result was three factors with eigenvalues greater than 1, accounting for 67% of the variance. Three changes in the data for the current study necessitated re-running the principal components analysis.

First, the current study included data from two additional group psychotherapy sessions that occurred after the parent study was completed. Second, the 6-month follow-up outcome data were an added data set not part of the parent study. Third, deletion of pre- and post-therapy Therapist Target Severity ratings in the current study, although included in the parent study, was necessary because these ratings were not available at 6-month follow-up. The major advantage in re-analysis of the principal components data is the inclusion of 6-month follow-up data.

Therefore, in the current study, the comprehensive battery of 14 outcome variables, taken at three points in time (pre-therapy, post-therapy, and 6-month follow-up), was reduced to a descriptive set of outcome residual gain factor scores to facilitate further analysis. The results of the pre-therapy, post-therapy, and 6-month follow-up mean comparisons indicated that most of the significant changes occurred between pre- and post-therapy and between pre-therapy and 6-month follow-up. Factor analysis of the variables focused on these two comparisons. The magnitude of improvement or gain between therapy periods was of interest. The final result of these (data reduction) analyses was a two-factor solution that could be used for both pre- to post-therapy and pre-therapy to 6-month follow-up comparisons. The simplicity of this outcome factor solution facilitated conceptualization and interpretation of subsequent analysis.

To prepare for outcome factor analytic studies, residual gain scores were calculated. For each pairing (i.e., pre- and post-therapy, and pre-therapy and 6-month follow-up) of the 14 therapy measures, residual gain scores were calculated, which represented the change in score from pre-therapy to post-therapy and from pre-therapy to 6-month follow-up. This was accomplished by conducting a regression analysis for each pair of pre- and post-therapy scores and pre-therapy and 6-month follow-up scores. The regression analysis produced unstandardized residuals, which were the observed score at post-therapy minus the unstandardized predicted score for post-therapy and the observed score at 6-month follow-up minus the unstandardized predicted score for 6-month follow-up. The pre- to post-therapy unstandardized residuals divided by the standard deviation of the post-therapy score equaled the residual gain score. In the case of the pre-therapy to 6-month follow-up calculations, the unstandardized residuals divided by the standard deviation of the 6-month follow-up score equaled the residual gain scores. The residual gain score represented the improvement, deterioration, or no change patients reported that was over and above predictions from their pre-therapy scores.

A principal components analysis of the residual gain scores from pre- to post-therapy for the 14 therapy measures produced two factors. The number of factors was determined through examination of the eigenvalues and application of the scree test. Principal Component I had an initial eigenvalue of 7.14 and accounted for 51.0% of the variance. Principal Component II had an initial eigenvalue of 1.51 and accounted for 10.8% of the variance. The total common variance accounted for by these two components was 61.8%. The two principal components extracted were rotated to a varimax criterion and the resulting rotated component loadings are in Table 4. The variance for varimax rotated Component I was 5.30 and for Component II was 3.35. The first 10 measures loaded moderate to high (.54 or greater) on varimax rotated Component I, with measures of anxiety and depression loading the highest (.82 or greater). The last four measures loaded moderate to high (.62 or greater) on Component II, with measures of IES-Intrusion and IES-Avoidance loading the highest (.81 or greater).

A principal components analysis of the residual gain scores for the pre-therapy to 6-month follow-up also resulted in two factors on the basis of an examination of the eigenvalues and application of the scree test. Principal Component I had an initial eigenvalue of 8.27 and accounted for 59.1% of the variance. Principal Component II had an initial eigenvalue of 1.18 and accounted for 8.4% of the variance. The total common variance accounted for by the two components was 67.5%. The variances for the two varimax rotated principal components were 6.05 for Component I and 3.40 for Component II. The results in Table 5 show that the first 10 measures loaded moderate to high (.65 or greater) on Component I, with the IES-Intrusion and CGF measures loading the highest (.86 or greater). The last four measures loaded moderate to high (.61 or greater) on Component II, with measures of Target Objectives Severity-Patient Rating and Independent Assessor Rating loading the highest (.73 or greater).

The principal components analysis of the two therapy periods resulted in seemingly different factors (see Tables 4 and 5). To assess the similarity in factor structures explicitly, an orthogonal procrustes rotation (Schönemann, 1966) of the two sets of matrices was conducted. The pre-therapy to 6-month follow-up matrix, which had the smaller sample (*N* = 65), was rotated into the larger sample (*N* = 99) of the pre- to post-therapy matrix. The coefficients of congruence (cf. Mulaik, 1972) were .96 and .92, indicating that the resulting orthogonal procrustes matrix was virtually identical for the two matrices. Therefore, the resulting orthogonal procrustes matrix was used instead of the original two matrices.

Instead of using differential weights, a trinary system of –1, 0, and +1 was used to form composites from the residual gain scores. Comparing the two loadings for each variable, the highest loading received a +1 or –1, depending on the sign of the weighting, and the lowest received a 0. A trinary system of determining composites replicates better than using differential weights (i.e., regression weights have been shown to vary considerably in random samples taken from the same population, Darlington, 1968; Gorsuch, 1980).

The result of the orthogonal procrustes rotation is in Table 6. Procrustes rotated Components I and II had variances of 5.49 and 3.96, respectively. Rotated Component I, defined by the first eight measures, was named "General Symptoms" because the measures that loaded highly seem to reflect general psychiatric symptoms such as anxiety, symptom severity, adjustment, and interpersonal problems. Rotated Component II, defined by the last six measures, was named "Grief Symptoms" because the measures that loaded highly seem to reflect symptoms related to complicated grief such as intrusion and avoidance. Subsequent analyses addressing therapy outcome used two composites derived from the two procrustes rotated components. They represented an elegant, simple, two-factor solution to reducing a complex set of standardized residual gain scores for 14 therapy measures administered on three separate occasions (pre-therapy, post-therapy, and 6-month follow-up).

Procedure

The primary objectives of the current study were to explore the relationships between cohesion, alliance, and outcome and to explore which perspective (patient, therapist, or observer) on cohesion and alliance best predicts improvement. Process and outcome data from patients and process ratings from therapists were available from the parent study of complicated grief. The current study used these data, but added a new component, which were observer ratings of alliance and cohesion.

Training of Observer Raters

Four bachelor level research assistants, who were staff of the Psychotherapy Research and Evaluation Unit affiliated with the Psychiatric Treatment Clinic, agreed to be observers in the current study. All of the research assistants were familiar with the parent study of complicated grief. Two had been directly involved in the research completing adherence ratings while sessions were in progress, audiorecording the sessions, and administering measures to patients and therapists.

Training for the current study consisted of rating audiotaped STPG sessions using the GCQ-S and the AQ. As these measures had not been previously been used by observers, a Rater's Guide manual was developed by the investigator for the current study for each measure based on descriptions for each item provided in the literature. Staff of the Psychotherapy Research and Evaluation Unit assisted in development by reviewing and commenting on the item descriptions. Rater's Guides for the GCQ-S and for the AQ are in Appendix A and B, respectively.

Observers rated alliance using the AQ, but in a manner that contrasted with ratings by the patients and therapists. Observers gave one rating for the group-as-a-whole alliance for each session. That is, their rating was for the alliance between the therapist and all patients as an entire group rather than separate ratings for each therapist-patient dyad. Therefore, each patient in a given session received the same rating by the observer.

The presumption was that cohesion or alliance, measured as a group phenomenon, is associated with the outcome of an individual member of the group. That is, patients from high alliance groups would have better outcomes. The literature provides little guidance for the resolution of this methodological issue (i.e., assignment of a group-as-a-whole rating to each individual in a group). Some researchers (e.g., Budman et al., 1989) used group measures to predict the outcome derived from individual patient ratings. Therefore, in the current study, individual patients in a session received the same group-as-a-whole rating by observers.

The GCQ-S was also a group-as-a-whole rating. The patients, therapists, and observers completed it in the same fashion, meaning that each rater assigned one rating for every session. Each patient in a session received three scores: the average patients' rating, the therapist's rating, and the average observer's rating. Therefore, any differences seen between sessions would occur either between the ratings given by patients, therapist, and observer for that session, or between sessions or groups.

The investigator held training meetings with the observers once per week over a period of about 3 months. Training consisted of reviewing the item descriptions, listening to 15- and 30-minute audiotaped segments from STPG sessions, rating these segments independently, and discussing the ratings. In total, trainees used four audiotaped sessions. The sessions used in training were relevant, because they were from the same 18 STPG used in the current study. However, to preserve study data integrity, different sessions were used for training than were used for the current study (i.e., audiotapes from Sessions 4, 8, or 12 were not used for training purposes).

Interrater Reliability of Training Data for Observer Ratings

To determine which of two rating methods had the best interrater reliability, observers rated a total of 19 training tapes. The first rating method was independent rating, where observers completed their ratings on their own without discussing them with other observers. The second rating method was modified consensus, where observers completed ratings on their own but then discussed the information supporting the reasons for their rating in a team of observers, and then again independently rated each item. The modified consensus method combined elements of group agreement or consensus methods and independent rating methods. The rating completed after the discussion was the rating used to calculate interrater reliability for the modified consensus approach.

To determine the interrater reliability of the independent and modified consensus methods, the four observers, previously trained in using the two observer measures, rated the middle 45-minute audiotaped segments of STPG sessions. Using a 45-minute compared to using the entire 90-minute session was found to be representative in terms of percentage of statements (80% to 90%) made by patients and therapist (Piper, Doan, Edwards, & Jones, 1979). Therefore, in the current study dubbed recordings of the original audio-recordings started 22.5 minutes into the session and stopped 45 minutes later, with 22.5 minutes remaining at the end of the session. The observers used these dubbed 45-minute recordings to rate the sessions. The sessions selected for determining interrater reliability were pertinent as they were from the same set of 18 STPG used in training and in the current study. The sessions used for determining interrater reliability were not the same STPG sessions used in the current study (i.e., not Sessions 4, 8, or 12) and were not sessions previously used in training. This procedure avoided data integrity problems resulting from rating the same sessions twice.

In the independent rating method, each of the four observers rated the same 12 STPG sessions, without consulting with each other. Interrater reliability of .60 or higher was not achieved when intraclass correlation coefficients [ICC (2,1)] were calculated. Supplementary training sessions did not improve interrater reliability. Intraclass correlation coefficient averages for each combination of two raters [ICC (2,2)], for all 12 sessions are as follows: -.42 for the AQ and .04 for the GCQ-S Engaged subscale. Negative intraclass correlation coefficients, as were obtained, are possible in situations where the mean square between sessions is less than either the residual mean square or the mean square within sessions (Lahey, Downey, & Saal, 1983). In other words, there were no differences in ratings between the sessions, and the variability was entirely due to raters. The independent rating method was determined not to be an acceptable method for this study, due to low interrater reliability.

For the modified consensus method, rating teams were constructed. The four observers served on four teams of three members each. Each team of three members listened to a 45-minute segment of an audiotaped STPG session together. Each team member then independently recorded a rating for the GCQ-S and AQ measures. Observers recorded their independent rating along the line labeled "1st Rating" after each question. After recording of the independent "1st Rating" was complete, starting with the first question team members discussed the reasons behind their rating and then independently rated the question again. This time observers recorded their response along the line labeled "2nd Rating," just beneath their first rating. They repeated this process discussing and re-rating each question. To minimize bias, the person leading the discussion for each question rotated through the team members. In addition, the order of presentation of GCQ-S and AQ measures alternated on the rating forms between sessions.

The modified consensus method teams rated seven STPG sessions. These sessions were new, not previously used for training purposes, or for previous interrater reliability ratings, nor used in the current study data. Intraclass correlation coefficients [ICC (2,3)] were $r = .80$ (*SD* = .32, range = .13 to 1.00) for the AQ and $r = .68$ (*SD* = .50, range = -.43 to .98) for the GCQ-S Engaged subscale. Based on these interrater reliability results, the modified consensus method was used to obtain observer ratings in the study.

Reducing Bias in Observer Ratings

A number of steps were taken to reduce the possibility of rater bias, prior to collecting the AQ and GCQ-S observer ratings for interrater reliability and also for the current study. Possible sources of bias were from observer team composition, previous observer knowledge of group, session, or treatment condition, halo effects, and observer knowledge of the intent of the current study.

In the modified consensus method, four teams of three observers minimized bias due to team composition. These were the same teams and method used previously in determining interrater reliability for the modified consensus approach. This method of team assignment accounted for every possible combination of three observers, thereby balancing the effect any individual team member had on another team member.

To minimize bias due to the type of psychotherapy session rated by each team, each team had as equal a number and type (supportive and interpretive) of psychotherapy session, as possible, to rate. The four teams rated 54 sessions (3 sessions from each of 18 groups). Two teams rated 13 sessions each and two teams rated 14 sessions each. Each team rated an equal number of sessions, as possible, from each psychotherapy group number (number 1 to 18), each session (Sessions 4, 8, and 12), and from each treatment condition (supportive or interpretive therapy). Each team rated the audiotaped sessions in a pre-assigned order, which alternated between treatment condition and session. The teams were blind to the group number, treatment condition, or session they were rating and did not access previously recorded patient or therapist ratings for these sessions. To reduce possible bias from order effects, the teams alternated between rating Form 1 (GCQ-S) and Form 2 (AQ) first or second from session to session. Finally, the teams were also blind to the intent of the current study by not knowing the study hypotheses.

The only information provided to the observers was the number of group members present and absent in each session they were rating and the name of the therapist running the group. This information was used to judge participation levels and helped the observers distinguish between the therapist's voice and the patients' voices on the audiotapes.

Interrater Reliability Coefficients for Observer Ratings

Observers used the modified consensus method to rate the middle 45-minute segment of 54 audio-recorded sessions. The 54 sessions comprised Sessions 4, 8, and 12 from each of the 18 STPG. One exception to this was an instance where the audio recording of Session 8 was not available, so the session used was just before it (i.e., Session 7).

Due to one session that was determined to be unreliable, as will be explained, the original sample of 54 sessions reduced to 53. Examination of intraclass correlation coefficients for each psychotherapy session determined whether any sessions were low in reliability ($r < .60$). However, using these coefficients proved to be misleading in situations where there was insufficient variability across items. Limited variance is a known source of unreliability in intraclass correlations (Lahey et al., 1983). A degeneration of correlation coefficients, due to insufficient variability, occurred in the current study when there was near perfect agreement. An example of this occurred when all observer ratings of the AQ measure items were 4, with the exception of two items. One observer gave a rating of 3 for one item and another observer gave a rating of 5 for a different item. Although this represented good agreement, the intraclass correlation coefficient was equal to only .13. Therefore, some coefficients did not accurately reflect the high degree of agreement achieved by the raters. This required an alternate method to determine if any ratings needed elimination due to low reliability.

Developing an agreement criterion assisted in eliminating low reliability ratings. The reliability criterion was set at 2, which represented the number of items in the AQ or GCQ-S Engaged subscale where the difference in ratings between observers, taken two at a time, was greater than or equal to 2. Therefore, if the difference between item ratings was 2 or greater for any two raters on two or more items the entire scale was eliminated for that session. This method resulted in the rejection of the AQ measure for one of the psychotherapy sessions. In this situation, one observer gave a rating of 2 for all four items of the AQ measure, while another observer gave a rating of 4 for all the items. The criterion for rejection was met because their ratings differed by 2 (i.e., 4 - 2 = 2) and this difference occurred for all items of the AQ measure. Elimination of this psychotherapy session reduced the number of tapes (i.e., sessions) from 54 to 53.

Interrater reliability was calculated on the sample of 53 sessions using intraclass correlation coefficients [ICC (2,3)] for the AQ and the Engaged Subscale of the GCQ-S. The intraclass correlation coefficients were .84 (*SD* = .23, range = .08 to 1.00) for the AQ measure and .94 (*SD* = .35 to 1.00) for the Engaged subscale of the GCQ-S. The ratings by the three observers, for each item of the AQ and GCQ-S for the sample of 53 psychotherapy sessions, averaged gave one score per item. The scores, when added together created the scale scores for each measure. These observer ratings were group-as-a-whole ratings for each session (i.e., individual patients within each session were not rated; only one rating was given to the whole group). However, to facilitate subsequent analyses and as explained earlier, assignment of the whole group session average score to each patient occurred (i.e., each patient in a session received the same observer rating as every other patient in the same session).

Ethical Considerations

As part of the parent study of complicated grief (Piper, McCallum et al., 2001), participants had been informed of the research project and completed the required protocol for informed consent. The procedures of the research study met all criteria of the Health Research Ethics Review Board, Faculty of Medicine, University of Alberta. In the current study, observers rated existing audio-recordings of group psychotherapy sessions. Therefore, no direct patient contact was required. To ensure confidentially and anonymity, the data for each patient were coded by number and all data were stored in a locked area.

RESULTS

Statistical analyses were conducted to achieve five study objectives. The results of these analyses appear in three sections: Therapy Outcome, Therapy Process, and Process-Outcome Prediction. Each of these sections concludes with a summary of the findings. A multimethod-multitrait analysis of the process measures is then presented.

The first study objective was to assess whether group psychotherapy resulted in improvement for patients at post-therapy and at 6-month follow-up. Also assessed was the influence of independent variables (treatment condition and patient gender) on outcome. These results appear in the first section, Therapy Outcome. Discussed first is the effect of the independent variables on the two outcome residual gain factors and on the 14 outcome variables. Following this are effect size calculations from pre-therapy to post-therapy and from post-therapy to 6-month follow-up for the 14 outcome variables.

The second objective was to explore the relationships between two alliance measures (AQ and MLBS) within and between perspectives (observer, patient, and therapist). Assessed were the scores for each measure of alliance within perspective as a function of treatment condition (supportive and interpretive therapy) and patient gender across phases of therapy (beginning, middle, and termination). Explored was the relationship between alliance and outcome ratings within each perspective, and also as a function of phase of therapy. Following this is an examination of the relationship between the two measures of alliance.

The third objective was to examine the relationship of cohesion ratings (GCQ-S Engaged subscale) within and between perspectives. Assessed were the scores for cohesion ratings within perspectives as a function of treatment condition and phase of therapy. In addition, the relationship between cohesion and outcome ratings within perspective was explored.

The fourth objective was to study the relationships between cohesion ratings and the two measures of alliance, within and between perspectives. In addition, discussed is the cohesion-alliance relationship as a function of phase of therapy.

The results for the second, third, and fourth objectives are presented in the section called Therapy Process. Presented are results for alliance (AQ and MLBS measures) and cohesion (GCQ-S measure). For each of these process variables, changes in rating as a function of therapy phase are considered first. Examined next is the influence of the two independent factors, gender and treatment condition, on process ratings. Following this is an examination of the relationships between the process variables and outcome. The last subsection of the Therapy Process section examines the associations between the alliance and cohesion measures.

The fifth objective was to investigate which process measures (alliance or cohesion) best predicted outcome. Assessed were outcome predictions by perspective and as a function of therapy phase. The results appear in the section, Process-Outcome Prediction. Presented are summary regression models that portray, for each perspective, the process variable ratings that were the best predictors of outcome.

Following presentation of the findings, under the heading Research Hypotheses: Supported or Refuted, is a review of the seven study hypotheses and discussion of the findings that either supported or did not support each hypothesis. The results section concludes with a section entitled Clinical Illustrations. Two group psychotherapy session segments are presented as illustrations of alliance and cohesion; one narrative depicts a high alliance-low cohesion session, while the other depicts a high cohesion-low alliance session.

Therapy Outcome

Presentation of outcome residual gain factor results begins by recapping their derivation and then examining the effect of independent variables on these factors. Following this is an examination of each of the 14 outcome variables that constitute the outcome residual gain factors. Descriptive statistics are presented for the 14 outcome variables, followed by the effects of the independent variables, and finally data are presented on effect sizes from pre- to post-therapy and from post-therapy to 6-month follow-up.

Outcome Factors

Patients completed 12 self-report therapy outcome measures (13 variables) on three occasions: before group therapy, at post-therapy (i.e., at the conclusion of Session 12), and 6 months after group therapy completion. Independent assessors completed one measure on the same three occasions. In total, there were 13 outcome measures (14 variables). As described earlier, a principal components analysis of the 14 residual gain outcome variables resulted in two outcome residual gain factors, General Symptoms and

Grief Symptoms, for each of two periods, pre- to post-therapy and pre-therapy to 6-months follow-up.

Effects of Independent Variables on Outcome Factors

To determine whether gender or treatment condition affected outcome, a multivariate analysis of variance, with two between participant-factors (treatment condition and patient gender), was conducted separately for the pre- to post-therapy outcome residual gain factors and pre-therapy to 6-months follow-up outcome residual gain factors. Separate analyses ensured maximum sample size. A listwise deletion of a full mixed analysis of analysis of variance would have reduced the sample size from 99 to 65, i.e., the number of patients at the 6-month follow-up. The results for both sets of analyses were not statistically significant. The pre- to post-therapy General Symptoms and Grief Symptoms residual gain factors were not significant for gender (*p* = .09, .82, respectively), treatment condition (*p* = .61, .57, respectively), or for the two-way Treatment x Gender interaction (*p* = .53, .48, respectively). The pre-therapy to 6-months follow-up, were not significant for gender (*p* = .052, .18, respectively), treatment condition (*p* = .17, .24, respectively), or for the two-way Treatment Condition x Gender interaction (*p* = .79, .33, respectively). The analysis indicated that the independent variables (gender and treatment condition) did not affect outcome. Separate, individual analyses also occurred for the 14 outcome variables.

Outcome Variable Descriptive Statistics

The descriptive statistics for each of the 14 outcome variables at pre-therapy, post-therapy, and 6-month follow-up are in Table 7 and 8 for the total sample, in Table 9 and 10 as a function of gender (men and women, respectively), and in Table 11 and 12 as a function of treatment condition (supportive and interpretive therapy, respectively). The higher the means the greater the degree of symptoms or functional impairment. The exceptions to this were the LS and SF-36-PF measures, where the lower the means the greater the degree of symptoms or functional impairment.

Effects of Independent Variables on Outcome Variables

To evaluate the change on the outcome variables, a mixed analysis of variance, with one within-factor (time) and two between participant-factors (treatment condition and patient gender) was conducted for each outcome variable separately. Although time involves three measurement points (pre-therapy, post-therapy, and 6-month follow-up) the data were analyzed across two times, pre- and post-therapy and post-therapy and 6-month follow-up, for each of the 14 therapy outcome variables. Measurement points were analyzed two at a time, rather than all three simultaneously. The reason for employing this method is because a listwise deletion of a full repeated measures analysis of variance would have reduced the sample size from 99 to 65 (i.e., the number of patients at the 6-month follow-up). The results are in Table 13 for the pre- to post-therapy analysis and in Table 14 for the post-therapy to 6-month follow-up analysis. Because of the relative disparity between men (*n* = 13) and women (*n* = 52) on the gender variable, and the small absolute number of men, results for the gender factors were based on minimal power and should be considered exploratory.

A Bonferroni correction was applied to compensate for the large number of statistical tests performed in each analysis (*p* = .05/14 tests = .004), resulting in an adjusted significance criterion of *p* = .004. In general, the results revealed a strong main effect for time, which was primarily due to a significant improvement in functioning from pre- to post-therapy. The results in Table 13 show that for 8 of the 14 therapy outcome variables the *F* statistic was statistically significant for time (i.e., pre- to post-therapy). These eight variables were two psychiatric symptom measures, TAS and BDI; four grief symptom measures, TRIG-PF, CGF, IES-A, and IES-I; and two target objective severity measures, TOS-IA and TOS-P. In each case of a significant result, the post-therapy mean was lower than the pre-therapy mean, indicating that patients reported an improvement in functioning after completing therapy. There were no statistically significant main effects for gender or treatment condition, no significant interactions for Gender x Time, Treatment Condition x Gender, or for Treatment Condition x Time, and the three-way interaction of Time x Gender x Treatment Condition was also not significant.

Regarding the mixed analysis of variance for the post-therapy to 6-month follow-up interval, after application of the Bonferroni correction (*p* = .05/14 tests = .004) and the adjusted significance criterion of *p* = .004, there were no statistically significant main effects for time or gender, nor two-way interactions for Gender x Time, Treatment Condition x Time or Gender x Treatment Condition, and the three-way interaction for Time x Gender x Treatment Condition was also not significant (see Table 14). Of note, these comparisons indicate that improvement did not continue into the 6-month follow-up period. However, it does indicate maintenance of the gains made during therapy up to 6 months later, without evidence for deterioration in the sample.

Outcome Variable Effect Sizes

Tables 7 and 8 also contain effect sizes and the associated *t* values and correlation coefficients from pre- to post-therapy and post-therapy to 6-month follow-up, respectively. There were significant differences between pre- and post-therapy, as represented by *t* values, for all but three variables and significant positive correlations between pre- and post-therapy scores for all variables (see Table 7). For post-therapy to 6-months follow-up, there were no significant differences between means, but all variables had significant positive correlations (see Table 8). The effect sizes were calculated by dividing the mean of the difference scores between two time intervals (e.g., pre- and post-therapy) by the standard deviation of these mean differences (Rosenthal & Rosnow, 1991). Generally, large effect sizes occurred for pre- to post-therapy outcome scores, while smaller effect sizes occurred when comparing post-therapy to 6-month follow-up. This indicates that the majority of the improvement happened between pre-therapy and post-therapy, and that although modest gains continued from post-therapy to 6-month follow-up, these gains were not statistically significant.

The effect sizes for pre- to post-therapy ranged from .04 to .98, with 10 therapy variables having large effect sizes of .50 or greater (see Table 7). The largest effect sizes and therefore the greatest improvements occurred for the grief measures (IES-A, IES-I, CGF, and TRIG-PF) and for the ratings of severity of the TOS-P and TOS-IA. The post-therapy to 6-month follow-up effect sizes were all in the small to medium range, from .10

to .34 (see Table 8). Three therapy variables (LS, TOS-IA, and TOS-P) had medium effect sizes ranging from .31 to .34. The symptom measures (BSI-GSI, TAS, IIP, and BDI) and the grief measures (IES-A, IES-I, CGF, and TRIG-P) had small effect sizes ranging from .20 to .27. This is in contrast to the pre- to post-therapy results where the grief measures had very large effect sizes.

Therapy Outcome Summary

In summary, the evaluation of change indicated a significant improvement on most of the 14 outcome variables from pre- to post-therapy. There were large effect sizes for the grief outcome variables and patient and independent assessor ratings of severity of distress associated with the patients' target objectives. However, the profile changed when comparing post-therapy to 6-month follow-up. The effect sizes were smaller, with three measures in the medium effect size range and no large effect sizes.

Using conservative Bonferroni corrections, there were no statistically significant analysis of variance results, other than the strong main effects for time between pre- and post-therapy. Patients of both genders in either form of treatment showed equivalent improvement. In addition, these gains were maintained over the 6 months of follow-up. The focus now shifts from considering outcome to considering the process of therapy. Ultimately of interest is how group therapy processes relate to outcome.

Therapy Process

Results are first presented for alliance (AQ and MLBS) measures, then for cohesion (GCQ-S measure), and finally for the relationships between cohesion and alliance. Within each subsection, considered first is the pattern of process ratings across phases of therapy, followed by data for the effect of the independent variables, and concluding with process-outcome relationships.

Alliance

Alliance (AQ) Process Measure. Presented first are descriptive statistics for the alliance (AQ) measure ratings, followed by correlations within and between perspectives (observer, patient, and therapist). Discussed next are effects of the independent variables. Examined for each perspective (patient, observer, and therapist) separately are changes in alliance ratings as a function of treatment condition (supportive and interpretive therapy) and phase of therapy (beginning, middle, and termination). Discussion of the correlations between alliance (AQ) and outcome close this subsection. Presentation of data on alliance as measured by the MLBS then follows.

Alliance (AQ) Descriptive Statistics. The descriptive statistics for the AQ measure by observer, patient, and therapist for beginning, middle, termination stages of therapy, and overall therapy average are in Table 15 for the total sample, Table 16 as a function of gender, and Table 17 as a function of treatment condition. The higher the mean the higher the rated quality of the therapeutic alliance. In general, at each phase of therapy patients rated the alliance higher than did the therapists, who in turn rated alliance higher than did the observers (Figure 1).

Alliance (AQ) Ratings Within Perspectives. Correlated with each individual therapy phase (beginning, middle, and termination) was the average AQ ratings for the three therapy phases within each perspective. The results are in Table 18. The correlation coefficients that appear in parentheses in Table 18 are the correlations between overall averages and a particular therapy phase. However, for these correlations, removed from the overall average is the data for that particular therapy phase. For example, in a correlation with overall average and the beginning phase of therapy, the overall average is an average of only the middle and termination phases. Removed from the overall average is the data from the beginning phase. By removing the duplication, the correlation coefficients decreased (see Table 18). However, even with the duplication removed, all the correlation coefficients were positive and statistically significant. This indicated that within each perspective raters tended to rate alliance consistently across phases of therapy.

Alliance (AQ) Ratings Between Perspectives. To examine the degree of overlap between perspectives, correlation coefficients by perspective and by phase of therapy were calculated (see Table 18). The adjusted significance criterion, after application of the Bonferroni correction (p = .05/12 tests = .004), was p = .004. Underlined in Table 18 are the 12 intercorrelations. They occur in pairs according to phase (e.g., beginning phase rating for patient and observer, and middle phase rating for therapist and observer). Alliance ratings by patients and therapists were positively correlated, and were significant for three of the four phase intervals (range r = .24 - .46).

Correlation coefficients for patient and observer ratings and therapist and observer ratings of alliance were not statistically significant. Only patient and therapist ratings had statistically significant correlation coefficients indicating in general that ratings were independent.

Effects of Independent Variables on Alliance (AQ). To determine whether patient gender or treatment condition influenced ratings of the alliance, a mixed multivariate analysis of variance was conducted for the patient and therapist perspectives on the AQ. There was one within-factor (phase of therapy) and two between participant-factors (gender and treatment condition) with patient and therapist ratings of the alliance serving as the dependent variables. Observer ratings were not included in this analysis because their ratings were for the group as a whole, whereas patients and therapists completed their ratings for each individual within the therapy groups. Conducted separately for the observer perspective was a mixed analysis of variance that excluded gender because of the group-as-a-whole rating method.

Tables 16 and 17 also contain the mean differences, *t* tests, as a function of gender and treatment condition, respectively. The Bonferroni correction was applied to each set of *t* tests (in Table 16, $p = .05/8$ tests = .006; and in Table 17, $p = .05/12$ tests = .004). Mean comparisons indicated no significant differences between men and women on alliance (AQ) ratings (see Table 16). Only observer-rated alliance (AQ) was statistically different as a function of treatment condition (see Table 17). Observers rated supportive therapy higher in alliance (AQ) than interpretive therapy.

For ratings by the patients and therapists, the mixed multivariate analysis of variance revealed a significant main effect for therapy phase, $F(4, 67) = 3.87$, $p = .007$.

There were no significant effects for gender, treatment condition, or the two-way or three-way interactions. The univariate tests reveal that the main effect for phase of therapy was restricted to the patients' AQ ratings (see Table 19). Post hoc mean comparisons using *t* tests determined for which phase patient ratings differed. A Bonferroni correction was applied ($p = .05/3$ *t* tests performed for phase comparisons = .02) resulting in an adjusted significance criterion of $p = .02$. Pairwise mean comparisons revealed that patient alliance ratings were significantly higher at the termination phase than at the middle phase of therapy ($M = 4.49$, $SD = 1.30$; $M = 4.03$, $SD = 1.25$, respectively), $t\ (86) = 3.78$, $p < .0005$. Termination phase means were also higher than at beginning phase ($M = 4.49$, $SD = 1.30$; $M = 3.91$, $SD = 1.03$, respectively), $t\ (86) = 5.74$, $p < .0005$. There were no significant differences across phase of therapy for the therapist ratings of alliance.

For observers, the mixed analysis of variance revealed a significant main effect for treatment condition and a Therapy Phase x Treatment Condition interaction (see Table 19). Post hoc mean comparisons using *t* tests determined for which phase and treatment condition observer ratings differed. A Bonferroni correction was applied ($p = .05/9$ *t* tests performed for phase and treatment condition comparisons = .006) resulting in an adjusted significance criterion of $p = .006$. Mean comparisons revealed that there were no significant differences between alliance ratings for interpretive and supportive therapy at beginning phase of therapy. However, for interpretive therapy middle phase alliance ratings were significantly lower than alliance ratings in beginning phase of therapy ($M = 2.89$, $SD = .77$; $M = 3.32$, $SD = .79$, respectively), $t\ (43) = -3.29$, $p < .005$. For supportive therapy, there were no significant differences in alliance ratings between beginning and middle therapy phases. There were no significant differences in alliance ratings between middle and termination therapy phases for either interpretive or supportive therapy. In sum, observer ratings of alliance declined during the middle phase of interpretive therapy but remained stable throughout all phases of supportive therapy. Patient ratings of alliance using the AQ measure increased significantly across phases of therapy.

Alliance (AQ) and Outcome. AQ ratings were correlated with the outcome residual gain factors to determine the strength of association. Alliance (AQ) ratings were obtained from three perspectives (observer, patient, and therapist), three therapy phases (beginning, middle, and termination), and the overall average of the three phases. General and Grief Symptoms residual gain factors for pre- to post-therapy and for pre-therapy to 6-month follow-up represented outcome. A Bonferroni correction applied to each set of eight outcome residual gain factor by perspective correlations (p = .05/8 tests = .006) resulted in an adjusted significance criterion of p = .006. The results are in Table 20.

The most prominent pattern is the significant correlations for patient ratings of alliance (see Table 20). Patient ratings of alliance on the AQ positively correlated with improvement for both of the pre- to post-therapy outcome residual gain factors. For these outcome factors, middle, termination, and overall average of therapy phase AQ ratings were significantly associated with benefit.

The correlation analysis indicated that patient ratings of alliance had the strongest relationships with both of the pre- to post-therapy outcome residual gain factors. There were no significant relationships involving observer or therapist ratings, or between alliance variables and any of the pre-therapy to 6-month follow-up outcome residual gain factor scores.

Alliance (MLBS) Process Measure. The AQ alliance data just discussed involved ratings by observers, patients, and therapists. However, MLBS alliance ratings were by patients only. Presented will be descriptive statistics, followed by the effect of independent variables. Alliance (MLBS) was examined by phase of therapy, treatment condition, and gender. Also presented will be the relationship between alliance (MLBS) ratings and outcome and the correlations between two ratings of alliance (the MLBS and the AQ).

Alliance (MLBS) Descriptive Statistics. The descriptive statistics for the MLBS are in Table 21 for the total sample, Table 22 as a function of gender, and Table 23 as a function of treatment condition. The higher the means the more of the characteristic was rated as being present. Generally, patients rated their therapist as high in positive qualities, low in dissatisfaction, and low in compatibility (Figure 2).

Alliance (MLBS) Ratings Within Subscales. MLBS subscale ratings for beginning, middle, and termination phases were averaged. Correlation coefficients for the overall average with each of the three phases are in Table 24. All were positive correlations and statistically significant. These correlations remained significant even when the duplication was removed from the overall averages prior to correlation with each phase (see the correlation coefficients in parentheses in Table 24). Within each MLBS subscale patients rated each subscale consistently over phase of therapy. The greatest consistency occurred for the Positive Qualities and Compatibility subscales, with slightly less consistency for the Dissatisfaction subscale.

Alliance (MLBS) Ratings Between Subscales. In order to determine the degree of association between MLBS subscales and by therapy phase, correlation coefficients were calculated. The Bonferroni correction was applied to each grouping of 12 subscale by phase intercorrelations (*p* =.05/12 tests = .004) denoted by underlining in Table 24. The resulting adjusted significance criterion was *p* = .004. The highest positive correlations occurred between Positive Qualities and Compatibility for middle, termination, and overall average of therapy phases. Significant negative correlations occurred between Positive Qualities and Dissatisfaction also for middle, termination, and overall average of therapy phases. There were no significant relationships between Compatibility and Dissatisfaction. This indicates that Positive Qualities shares some overlap with Dissatisfaction and Compatibility, but the latter two subscales are distinct.

Effects of Independent Variables on Alliance (MLBS). To determine whether gender or treatment condition influenced how patients rated their therapists during therapy, a mixed multivariate analysis of variance with one within-factor (phase of therapy), and two between participant-factors (treatment condition and patient gender) was conducted. The dependent variables were the three subscales of the MLBS (Positive Qualities, Dissatisfaction, and Compatibility).

Tables 22 and 23 also contain the mean differences, *t* tests, as a function of gender and treatment condition, respectively. The Bonferroni correction was applied to each set of *t* tests (*p* = .05/12 tests = .004) resulting in an adjusted significance criterion of *p* = .004. Mean comparisons indicated no significant differences between men and women on alliance (MLBS) ratings (see Table 22), however, there were significant differences for ratings of alliance (MLBS) between supportive and interpretive therapy (see Table 23). Patients in supportive therapy rated MLBS alliance (positive qualities, compatibility, and satisfaction) higher than did patients in interpretive therapy.

The mixed multivariate analysis of variance produced two main effects, for treatment condition, *F*(3, 85) = 6.71, $p < .0005$, and for therapy phase, *F*(6, 82) = 2.69, $p = .02$, but no significant two-way or three-way interactions. The univariate analysis of variance results indicated that the treatment condition effect was evident for the Positive Qualities and Dissatisfaction subscales and that the therapy phase effect was evident for the Positive Qualities subscale (see Table 25). Ignored was the significant Therapy Phase x Treatment Condition interaction for the Compatibility subscale, for although it was significant, the multivariate analysis of variance was not significant (see Table 25). Mean comparisons showed that the main effect for treatment condition was due to patients in supportive therapy rating their therapist higher in Positive Qualities than did patients in interpretive therapy (*M* = 5.00, *SD* = .84, *M* = 4.28; *SD* = .94, respectively). The main effect for treatment condition on the Dissatisfaction subscale was due to interpretive therapy patients having higher dissatisfaction ratings than supportive therapy patients (*M* = 3.35, *SD* = 1.21, *M* = 2.52; *SD* = 1.16, respectively). Post hoc mean comparisons using *t* tests helped to determine between which phases Positive Quality ratings differed. The Bonferroni correction was applied ($p = .05/3$ *t* tests performed for phase comparisons = .02) resulting in an adjusted significance criterion of $p = .02$. Mean comparisons revealed that the main effect for therapy phase was associated with a linear increase in Positive Qualities ratings across phases. Patients rated their therapists as significantly higher in Positive Qualities at middle phase than at beginning phase (*M* = 4.69; *SD* = .96; *M* = 4.39, *SD* = 1.01, respectively), *t* (95) = 3.55, $p < .001$. Termination phase ratings were also higher than beginning phase ratings (*M* = 4.79; *SD* = 1.13; *M* = 4.37, *SD* = 1.07, respectively), *t* (93) = 4.20, $p < .0005$.

Alliance (MLBS) and Outcome. Patient ratings on the three MLBS subscales were correlated with the outcome residual gain factors to determine the degree of association. Adjusting for the number of statistical analyses, application of the Bonferroni correction to groupings of eight outcome residual gain factors by perspective correlations (p = .05/8 tests = .006) resulted in an adjusted significance criterion of p = .006. Only overall average ratings of dissatisfaction were significantly and positively correlated with an increase in grief symptoms in pre- to post-therapy (see Table 26).

Alliance (AQ and MLBS) Interrelationships. Correlation coefficients were computed between AQ and MLBS ratings to evaluate the degree of relationship between these alliance measures. Application of the Bonferroni correction to groupings of 12 perspective by MLBS subscale intercorrelations (p = .05/12 tests = .004) resulted in an adjusted significance criterion of p = .004. A grouping of 12 intercorrelations contained one perspective, three phases, and the overall average for each of the MLBS subscale ratings correlated with the AQ ratings (e.g., observer AQ ratings at beginning phase correlated with each MLBS subscale beginning phase). These groupings appear underlined by perspective in Table 27. Patient ratings of therapists' Positive Qualities (MLBS) were significantly and positively correlated with patient ratings of alliance (AQ) across all three phases of therapy (beginning, middle, and termination) and for the overall average (see Table 27). The correlations ranged from r = .48 to .67. Patient ratings of therapist Compatibility (MLBS) for the termination phase of therapy and the overall average were positively correlated with patient ratings of alliance (AQ), but there were no significant correlations with Dissatisfaction (MLBS).

Observer and therapist ratings did not show the same pattern of significant correlation as did patient ratings. Observer ratings of alliance (AQ) were significantly and positively correlated with patient ratings of MLBS Compatibility at middle phase of therapy and for the overall average of phases (see Table 27). Therapist ratings of alliance (AQ) were significantly and positively correlated with MLBS Positive Qualities and negatively correlated with MLBS Dissatisfaction at the termination phase of therapy.

Alliance Summary. Analysis by treatment condition showed that observers rated alliance differently than did patients or therapists. Observers rated alliance, as measured by the AQ, as higher in supportive therapy than in interpretive therapy for the middle and termination phases of therapy. Therapists, however, rated alliance as not changing over therapy phase, and as equivalent across treatment conditions. There were no significant gender differences in AQ or MLBS ratings.

There was only a moderate overlap in AQ alliance ratings across perspectives. Within each perspective, ratings of alliance were generally consistent across all three phases of therapy. Patients rated alliance higher than did the therapists or observers. Patients also rated AQ alliance as increasing from middle to termination phases of therapy, whereas observer or therapist ratings showed no significant increases or decreases across phases. Of all combinations of perspectives, patients and therapists were the most similar in their ratings of AQ alliance.

There were statistically significant positive correlations between patient ratings of alliance (AQ) for middle and termination phases of therapy and the overall phase average and improvement on both the Grief and General Symptoms pre- to post-therapy outcome residual gain factors. The patients' experience of a positive alliance was positively correlated with improvement.

MLBS Positive Qualities was positively correlated with both Compatibility and Dissatisfaction subscales at the middle, termination, and overall average of therapy phases. However, Compatibility and Dissatisfaction were not significantly correlated. Patient ratings of their therapists' positive qualities were higher at middle and termination phases of therapy than at the beginning phase. Additionally, patients in supportive therapy rated their therapist as higher in positive qualities and had greater satisfaction with the therapist than did patients in interpretive therapy. Based on the MLBS, only ratings of dissatisfaction with the therapist, using the overall average of therapy phases, were positively correlated with deterioration in pre- to post-therapy grief symptoms.

Patients' impression of the therapist's positive qualities and compatibility were positively correlated with patients' rating of alliance on the AQ measure. This suggests that the patient's rating of the alliance is at least partly contingent on perceptions of the therapist's positive qualities.

Cohesion

Cohesion Process Measure. Presented first are descriptive statistics for cohesion, using the Engaged subscale of the GCQ-S, followed by correlational analyses within and between perspectives (observer, patient, and therapist). Presented next are the effects of the independent variables, followed by cohesion (GCQ-S Engaged subscale) data across three phases of therapy (beginning, middle, and termination) in the two treatment conditions (supportive and interpretive therapy). Data for each of the three perspectives were analyzed. Also presented is the examination of the relationships between cohesion and outcome. Gender was not included in these analyses because the ratings of cohesion were group-as-a-whole ratings, rather than for individual patients within each group.

Cohesion Descriptive Statistics. The descriptive statistics for cohesion (GCQ-S Engaged) are in Table 28 for the total sample and Table 29 as a function of treatment condition. The means reflected higher cohesion (GCQ-S Engaged) ratings by patients and therapists than by observers (Figure 3). The higher the means the more of the characteristic was rated as being present.

Cohesion Ratings Within Perspectives. The overall phase average was the GCQ-S Engaged subscale data averaged across the three phases of therapy for each perspective. Correlation coefficients between the overall phase averages and the beginning, middle, and termination phases of therapy are in Table 30. All correlation coefficients were positive. Highly significant correlations occurred between observer overall phase averages and observer beginning, middle, and termination phase of therapy ratings. Of note was that the same pattern of significant correlation coefficients also occurred for within perspective patient and therapist ratings of cohesion. These correlations remained statistically significant even when the duplication was removed from the overall averages before correlation with each phase (see the correlation coefficients in parentheses in Table 30). The results showed that the raters within each perspective tended to rate cohesion consistently across phase of therapy.

Cohesion Ratings Between Perspectives. In order to determine the degree of association between perspectives and by therapy phase for the GCQ-S Engaged subscale, correlation coefficients were calculated (see Table 30). The Bonferroni correction was applied to each grouping of 12 therapy phase intercorrelations (p = .05/12 tests = .004) resulting in an adjusted significance criterion of p = .004. The 12 intercorrelations were in pairs according to phase (e.g., beginning phase rating for patient and observer, and middle phase rating for therapist and observer). Underlining in Table 30 denotes these 12 intercorrelation pairs. Between perspectives, only observer and therapist cohesion ratings at beginning and middle phases of therapy were statistically significant.

Effects of Independent Variables on Cohesion. To determine whether treatment condition influenced cohesion ratings over phase of therapy, a mixed multivariate analysis of variance using the GCQ-S Engaged subscale was conducted. There was one within-factor (phase of therapy), one between-factor (treatment condition), and three dependent variables (observer, patient, and therapist ratings for the Engaged subscale). Gender was not used as a between participant factor variable, as all cohesion ratings were completed on the group-as-a-whole, rather than for individuals in the group.

Table 29 also contains the mean differences, t tests, as a function of treatment condition. The Bonferroni correction was applied (p = .05/12 t tests = .004) resulting in an adjusted significance criterion of p = .004. Mean comparisons indicated significant differences for only observer cohesion ratings (see Table 29). Observers rated cohesion significantly higher in supportive therapy than in interpretive therapy.

The mixed multivariate analysis of variance had two significant main effects treatment condition, $F(3, 85) = 2.92$, $p = .039$, and therapy phase, $F(6, 82) = 7.68$, $p < .0005$. These was also a Treatment Condition x Therapy Phase interaction, $F(6, 82) = 11.68$, $p < .0005$. The results of the univariate analysis of variance for each of the three dependent variables are in Table 31. Post hoc mean comparisons using *t* tests helped to determine between which phase or treatment condition ratings differed.

There was an interaction effect between therapy phase and treatment condition for observer ratings (see Table 31). The Bonferroni correction was applied (*p* = .05/9 *t* tests performed for phase by treatment condition comparisons = .006) resulting in an adjusted significance criterion of *p* = .006. Mean comparisons showed that observer ratings of cohesion (GCQ-S Engaged) in supportive therapy were significantly higher in the middle phase than in the beginning phase of therapy (*M* = 3.02, *SD* = .61; *M* = 2.63, *SD* = .80, respectively), *t* (51) = - 3.96, *p* < .0005. The opposite occurred for interpretive therapy. Middle phase observer ratings of cohesion in interpretive therapy were significantly lower than ratings at the beginning phase of therapy (*M* = 2.42, *SD* = .87, *M* = 2.96, *SD* = .83, respectively), *t* (43) = 5.95, *p* < .0005. Also, termination phase cohesion ratings in interpretive therapy were significantly lower than in the beginning phase of therapy (*M* = 2.37, SD = .92; *M* = 2.96, *SD* = .83, respectively), *t* (43) = 5.02, *p* < .0005.

Patient ratings of cohesion indicated a main effect for therapy phase (see Table 31). The Bonferroni correction was applied (*p* = .05/3 *t* tests performed for phase comparisons = .02) resulting in an adjusted significance criterion of *p* = .02. All pairwise comparisons of means for the three phases were significant indicating a linear increase over phase of therapy. Patient cohesion ratings at middle phase were significantly higher than at the beginning phase of therapy (*M* = 4.22, *SD* = .79; *M* = 3.91, *SD* = .95, respectively), *t* (96) = - 4.08, *p* < .0005. Cohesion ratings at the termination phase were significantly higher than at the middle phase (*M* = 4.56, *SD* = .74; *M* = 4.25, *SD* = .80, respectively), *t* (93) = - 3.70, *p* < .0005. Also, ratings at the termination phase were significantly higher than ratings at the beginning phase of therapy (*M* = 4.54, *SD* = .74; *M* = 3.92, *SD* = .96, respectively), $t\ (94) = -6.35, p < .0005$.

Therapist ratings of cohesion resulted in a main effect for therapy phase (see Table 31). The Bonferroni correction was applied ($p = .05/3$ *t* tests performed for phase comparisons = .02) resulting in an adjusted significance criterion of $p = .02$. Pairwise mean comparisons identified differences significant at $p < .05$, but because they did not reach the $p = .02$ significance criterion, they were not reported.

The results indicated that treatment condition influenced only observer ratings of cohesion (ratings similar at beginning phase of therapy, but then decreased for interpretive therapy and increased for supportive therapy). Patients rated cohesion as progressively increasing as therapy proceeded.

Cohesion and Outcome. To determine the association between cohesion as rated from different perspectives and the outcome residual gain factors, correlation coefficients were calculated. After application of the Bonferroni correction to each set of eight correlations ($p = .05/8 = .006$), the resulting adjusted significance criterion was $p = .006$. Only cohesion ratings by patients were significantly and positively correlated with improvement (see Table 32). Beginning phase of therapy and overall average phase ratings of cohesion (GCQ-S Engaged) were positively correlated with improvement on the pre- to post-therapy Grief Symptoms outcome residual gain factor. Of note was a similar pattern for patient-rated cohesion for the pre-therapy to 6-month follow-up outcome residual gain factor scores. Beginning phase of therapy ratings were positively correlated with improvement in Grief Symptoms for the pre-therapy to 6-month follow-up outcome residual gain factor. Cohesion ratings by observers and therapists did not significantly correlate with the outcome residual gain factor scores. The results indicated that only patient ratings of cohesion were significantly associated with outcome. It is possible that this finding is related to method variance, as outcome ratings are also patient self-report.

Cohesion Summary. Within each perspective, observers, patients, and therapists rated cohesion consistently across phase of therapy. Between perspectives, observers and therapists' ratings of cohesion were positively correlated at the beginning and middle phases of therapy. Observers rated cohesion the same in both interpretive and supportive therapy for the beginning phase of therapy, but then in middle and termination phases, they rated cohesion significantly higher for supportive therapy and lower for interpretive therapy. Patients, on the other hand, rated cohesion as increasing from beginning to middle and from middle to termination phases of therapy, irrespective of treatment condition. Therapists rated cohesion as not changing over phase of therapy or by treatment condition. Patient ratings of cohesion in the beginning phase of therapy and across all phases were significantly and positively correlated with improvement, in particular with both Grief Symptoms outcome residual gain factors.

Alliance-Cohesion Interrelationships

Presented in this section are the correlations within each perspective between the two alliance measures and cohesion, first for the AQ then for the MLBS. Following this is a comparison of the strength of correlation coefficients between alliance and cohesion at each phase of therapy.

Alliance-Cohesion Overlap. To determine the interrelationships between cohesion and the two measures of alliance (AQ and MLBS) as rated by perspective over three phases of therapy, correlation coefficients were computed. After application of the Bonferroni correction to each set of 12 intercorrelations (*p* = .05/12 tests = .004), the resulting adjusted significance criterion was *p* = .004. The 12 intercorrelations were the same perspective at the same phase (e.g., observer AQ and GCQ-S Engaged ratings at beginning phase) and appear underlined in Table 33.

The relationship between alliance as measured by the AQ and cohesion (GCQ-S Engaged) will be considered first. Noticed within each perspective was that the highest correlation coefficients occurred for observer ratings of cohesion and alliance (AQ) for all phases of therapy and the overall phase average (see Table 33). The correlation coefficients, which were positive, ranged from *r* = .79 to .89, or a 62% to 79% overlap between observer-rated alliance (AQ) and cohesion. Correlation coefficients, ranging from *r* = .33 to .59, were seen for patient ratings of cohesion and alliance (AQ) at all phases of therapy and for the overall phase average. These correlation coefficients were also positive and represented an 11% to 35% overlap between patient-rated alliance (AQ) and cohesion. Therapist ratings resulted in only one statistically significant positive correlation between alliance (AQ) and cohesion occurring at middle phase of therapy. This indicated little overlap between alliance (AQ) and cohesion for therapist ratings. Observer ratings, followed by patient ratings, had the greatest percentage of overlap indicating similarity in rating of the two constructs of alliance (AQ) and cohesion.

The relationship between alliance as measured by the MLBS and cohesion (GCQ-S Engaged) is considered next. After application of the Bonferroni correction to each set of 12 intercorrelations (*p* = .05/12 tests = .004), the resulting adjusted significance criterion was *p* = .004. Within each perspective only the patients' rating of alliance (MLBS Positive Qualities subscale) was significantly and positively correlated with patient-rated cohesion (see Table 34). This significant correlation occurred across all three phases of therapy and for the overall phase average. The correlation coefficients ranged from *r* = .35 to .48, or a 12% to 23% overlap between alliance as measured by MLBS Positive Qualities and cohesion. There were no statistically significant correlations between therapist or observer ratings of cohesion (GCQ-S Engaged) and patient ratings of alliance (MLBS subscales).

Alliance-Cohesion and Phase of Therapy. To determine whether phase of therapy affected the relationship between cohesion and alliance (AQ), correlation coefficients by phase were examined. The results in Table 33 indicated that all significant correlation coefficients between cohesion and alliance (AQ) were positively correlated. The correlation coefficients for observer ratings of alliance, using the AQ, and cohesion were equivalent at the beginning and termination phases of therapy but lower at middle therapy; a high-medium-high pattern. For patient ratings, the highest correlation was at the termination of therapy, followed by the beginning phase of therapy, and lowest at middle therapy, a medium-low-high pattern. By contrast, the only significant correlation for therapist ratings occurred at middle therapy, a none-low-none pattern. The lower correlation at the middle phase of therapy for patients and observers indicated that they rated alliance and cohesion as independent constructs. Conversely, therapists rated these constructs as overlapping at the middle phase of therapy.

For patient ratings on the Positive Qualities subscale of the MLBS and cohesion, correlation coefficients were equivalent at each phase of therapy (see Table 34). Neither therapist nor observer Positive Qualities and cohesion correlation coefficients were significant.

Alliance-Cohesion Interrelationships Summary. Alliance (AQ) and cohesion ratings were highly correlated, when rated by patients or observers, but not when rated by therapists. A significant correlation occurred for the patient-rated MLBS alliance subscale (Positive Qualities) and patient-rated cohesion for all phases of therapy. The correlations between alliance (AQ) and cohesion were lower at the middle than at the beginning or termination phases of therapy for patients and observers. By contrast, for therapist ratings the highest correlation between alliance (AQ) and cohesion occurred at the middle phase of therapy.

Process-Outcome Prediction

Presented in this section by perspective are regression models, first for observers, then for patients, and finally for therapists. To determine which process measures were the best predictors of outcome within each perspective, regression models were developed by perspective for each phase of therapy. Entered simultaneously in the regression analysis were all process variables for each of the outcome residual gain factors at post-therapy and 6-month follow-up. For the observer and therapist perspectives, two variables were entered, the AQ rating and the Engaged subscale of the GCQ-S. Entered for the patient perspective were three additional process variables, the

MLBS subscales (Positive Qualities, Dissatisfaction, and Compatibility). Also entered as a control variable for the patient perspective was Treatment Condition (i.e., supportive and interpretive therapy). Treatment Condition had emerged as a main effect in a previous analysis of variance. In that analysis of variance, patients in supportive therapy rated their therapist as higher in positive qualities and lower in dissatisfaction than did patients in interpretive therapy.

Conducted for the beginning, middle, termination, and for the overall average of therapy phase ratings were separate regression analyses. The outcome residual gain factors were General Symptoms and Grief Symptoms for both pre- to post-therapy and the pre-therapy to 6-month follow-up. Sixteen regression analyses (3 phases of therapy and 1 overall average by 4 outcome residual gain factors) were generated for each of the observer, patient, and therapist perspectives, for a grand total of 48 analyses.

Observer Perspective

Discussed earlier were the correlation coefficients for observer ratings on the AQ and Engaged subscale of the GCQ-S. These results are repeated here because of their relevance to the current discussion of regression summary models. The correlation coefficients between observer predictor variables and the outcome residual gain factors are in Tables 20 and 32. There were no significant correlations for AQ or GCQ-S Engaged subscale ratings. Regression models for observer ratings for all three phases of therapy and the overall average of phases indicated no significant predictors.

Patient Perspective

Discussed earlier were the correlation coefficients between patient ratings on the AQ, the Engaged subscale of the GCQ-S, and the Positive Qualities, Dissatisfaction, and Compatibility subscales of the MLBS and the criterion variables. The results are again reviewed here. The correlation coefficients are in Tables 20, 26, and 32. For alliance (AQ), there were significant positive correlations for the middle, termination, and overall average phase of therapy ratings and the pre- to post-therapy General and Grief Symptoms outcome residual gain factors. The Dissatisfaction subscale of the MLBS rating averaged across phase of therapy showed a significant positive correlation with the pre- to post-therapy Grief Symptoms outcome residual gain factor. None of the MLBS subscales had significant associations with the pre-therapy to 6-months follow-up outcome residual gain factor scores. Patient ratings of cohesion (GCQ-S Engaged subscale) had significant associations at the beginning phase and for the overall phase average of therapy with improvement on the pre- to post-therapy Grief Symptoms outcome residual gain factor. Patient ratings of cohesion at the beginning phase of therapy were also associated with improvement on the pre-therapy to 6 months follow-up Grief Symptoms outcome residual gain factor.

Regression models for patient ratings are in Table 35 for the beginning phase of therapy, Table 36 for middle phase ratings, Table 37 for the termination phase ratings, and in Table 38 for the overall average of phases. When treatment condition was force-entered in Step 1 as a control variable, it was not statistically significant for any of the three phases of therapy or for the overall average of phases. However, when entering process variables at Step 2, treatment condition attained statistical significance in some of the regression analyses.

Patient-rated process measures were found to predict pre- to post-therapy improvement, but only process measures from the beginning phase of therapy were significant predictors of the pre-therapy to 6-month follow-up change. Beginning phase patient ratings on the MLBS Dissatisfaction subscale emerged as a significant (inverse) predictor of Grief Symptoms outcome residual gain factor improvement for pre- to post-therapy (see Table 35). Interpretive therapy and high cohesion (GCQ-S Engaged) predicted improvement on the pre-therapy to 6-months follow-up General Symptoms outcome residual gain factor. In middle therapy, interpretive therapy, alliance (AQ), MLBS Dissatisfaction (inverse) and MLBS Compatibility predicted improvement on the pre- to post-therapy General Symptoms outcome residual gain factor (see Table 36). The same set of variables, excluding treatment condition, also predicted improvement on the pre- to post-therapy Grief Symptoms outcome residual gain factor. By the termination phase of therapy, it was interpretive therapy, alliance (AQ), and MLBS Dissatisfaction (inverse) that predicted improvement in the pre- to post-therapy General Symptoms outcome residual gain factor (see Table 37). In addition, alliance (AQ) predicted improvement in the pre- to post-therapy Grief Symptoms outcome residual gain factor (see Table 37). The overall average of therapy phase ratings showed that interpretive therapy, alliance (AQ), and MLBS Dissatisfaction predicted improvement on the pre- to post-therapy General Symptoms outcome residual gain factor (see Table 38). The combination of alliance (AQ) and MLBS Dissatisfaction (inverse) predicted improvement in the pre- to post-therapy Grief Symptoms outcome residual gain factor.

Compared to observer ratings and later seen with therapist ratings, patient process ratings accounted for the largest proportion of outcome variance. Patient-rated process predictor variables explained 14% to 32% of the variance (range of R^2 values = .14 to .32). Patient ratings of alliance (AQ) emerged as a common predictor across a number of regression analyses while patient ratings of cohesion did not.

Therapist Perspective

Discussed earlier were correlation coefficients for therapist ratings on alliance (AQ) in Table 20 and cohesion (GCQ-S Engaged subscale) in Table 32. There were no significant correlations between therapist-rated cohesion or alliance and outcome.

Regression models for therapist process ratings in the beginning, middle, and termination phases of therapy produced no significant prediction of outcome. However, the overall therapy phase average ratings showed that therapist alliance ratings predicted improvement on the pre- to post-therapy General Symptoms outcome residual gain factor ($F = 3.33$, $p < .05$, $R^2 = .07$). The proportion of the variance that was explained by this significant result was 7%.

Outcome Regression Summary

For observers, there were no process measures which significantly accounted for outcome. For patients, interpretive therapy and alliance (AQ) and MLBS Dissatisfaction ratings emerged as important predictors. Interpretive therapy was a significant predictor of improvement on the General Symptoms outcome residual gain factor at pre- to post-therapy and for pre-therapy to 6-months follow-up. Alliance (AQ) at the middle and termination phases of therapy and for the overall therapy phase average featured as a significant predictor of both the General Symptoms and Grief Symptoms outcome residual gain factors at pre- to post-therapy. In addition to alliance (AQ), MLBS Dissatisfaction (inverse) and Compatibility predicted pre- to post-therapy General and Grief symptoms at middle therapy. For therapists, only alliance (AQ) ratings averaged over all therapy phases accounted for improvement in pre- to post-therapy General Symptoms. Patient ratings thus had the highest number of significant regression coefficients, 8 of a possible 16, while observers had 0 and therapists had 1. The eight significant regression coefficients for patient ratings accounted for between 14% and 32% of variation in improvement on the outcome residual gain factors.

Multimethod-Multitrait Analyses

Correlation matrices were examined using multitrait-multimethod analysis to test for construct validity (Campbell & Fiske, 1959). Patient, observer, and therapist perspectives represented multimethods while alliance and cohesion measures represented multitraits. Correlation matrices were examined for each phase of therapy and for the total of phases. However, because only patients completed two alliance measures (i.e., observers and therapists completed one alliance measure) a separate multitrait analysis was conducted for patients.

Patients completed two alliance measures and one cohesion measure at three phases of therapy. All correlations were statistically significant. Multitrait analysis of the resulting correlation matrix at each phase reveals that generally the two alliance measures

(MLBS Positive Qualities subscale and the AQ measure) had the highest correlations (.48, .52, .60, .67 for each phase and total, respectively) and the MLBS Positive Qualities subscale and the cohesion measure (GCQ-S Engaged subscale) generally had the lowest correlations (.35, .39, .36, .48 for each phase and total, respectively). See Tables 27 and 34. The correlation coefficients for the AQ measure and GCQ-S Engaged subscale were slightly lower than the coefficients for the two alliance measures (.49, .33, .59, .59 for each phase and total, respectively). See Table 33. These data suggest construct validity, as there was convergent validity between the two alliance measures and discriminant validity between one alliance measure and cohesion. The finding was generally consistent for all three phases and for the average of phases. This can be interpreted to mean that patients are conceptually differentiating alliance and cohesion, in particular when the MLBS Positive Qualities subscale is used to measure alliance.

By contrast, correlation matrices for patient, therapist, and observer ratings (multimethods) of alliance and cohesion (multitraits) revealed a different story. Observer AQ and GCQ-S Engaged ratings were significantly correlated at all phases and total, coefficients ranging from .79 to .89 (See Table 33). Construct validity is not supported for observer ratings because different traits (cohesion and alliance) are highly correlated using the same method (observer ratings). This result is therefore due to method variance.

For patients and therapists, some of the correlation coefficients in the validity diagonal were significant, which warranted further exploration. A validity diagonal is monotrait-heteromethod. For example, patient and therapist-rated GCQ-S Engaged subscale coefficients at the each phase and total were .23, .19, .01, and .17, respectively (see Table 30) and for AQ were .46, .24, .43, and .46 (see Table 18). These validity diagonal coefficients were generally higher than other coefficients within the same heteromethod blocks for the three phases and total, respectively (.30, .04, .26, and .19 for therapist AQ and patient GCQ-S Engaged; and .03, .04, .06, and .03 for patient AQ and therapist GCQ-S Engaged). See Table 33. However, the validity diagonals were not always higher than the heterotrait-monomethod coefficients for the three phases and total, respectively (.49, .33, .59, and .59 for patient-rated AQ and GCQ-S Engaged; and .16, .30, .14, and .14 for therapist-rated AQ and GCQ-S Engaged). See Table 33. This suggests some evidence for convergent and discriminant validity for patient and therapist ratings of cohesion and alliance (AQ).

In summary, although there is some indication that patient and therapist ratings of alliance (using the AQ) and cohesion (using the GCQ-S Engaged subscale) have construct validity, the strongest evidence for construct validity comes from patient ratings of cohesion and alliance, and in particular alliance as measured by the MLBS Positive Qualities subscale.

Research Hypotheses: Supported or Refuted

Seven research hypotheses were tested. The first was that alliance ratings from three perspectives (member, therapist, and observer) would be significantly and positively correlated. The second was that cohesion ratings from three perspectives (member, therapist, and observer) would be significantly and positively correlated. The third was that cohesion and alliance measures would be significantly and positively correlated with each other. The fourth was that the relationship between cohesion and alliance in the beginning stage of therapy would be higher than at the middle or termination stages of therapy. The fifth was that alliance would be a better predictor of improvement at post-therapy than cohesion. The sixth was that men and women's alliance ratings would not be significantly different, but that group therapy outcome benefit would be greater for women than for men. The seventh was that patients in both interpretive and supportive therapy would improve but that alliance and cohesion would be rated higher in supportive therapy.

A discussion of findings that support or refute each of the seven hypotheses are presented in sections entitled: Result 1: Alliance Differs Between Perspectives, Result 2: Cohesion Differs Between Perspectives, Result 3: Commonalities Between Cohesion and Alliance, Result 4: Cohesion-Alliance Similar in Beginning and Termination Therapy Phases, Result 5: Alliance Predicts Outcome, Result 6: Alliance Ratings and Outcome Similar for Men and Women, and Result 7: All Improve, but Interpretive Therapy Predicts Outcome.

Result 1: Alliance Differs Between Perspectives

The first hypothesis was that alliance ratings from three perspectives (patient, therapist, and observer) would be equivalent. There was no support for this hypothesis. The results indicated that although there were some similarities between perspectives, the differences were considerable.

Discussed first is alliance, as measured by the AQ. Within each perspective, there was evidence to suggest that alliance was rated consistently over phase of therapy (ratings within each session at beginning, middle, and termination phases were significantly and positively correlated). This indicated that how "judges" (observers, patients, and therapists) rated, for example, the beginning phase was similar to how they rated the middle and termination phases of therapy. In addition, how they rated the middle phase was similar to the termination phase, and so on. This supports the assumption that ratings were internally consistent within perspective.

However, *between* perspectives there were only a few significant correlations. Patient and therapist alliance ratings had significant positive correlations with each other at the beginning and termination phases of therapy. Observer and therapist ratings and observer and patient ratings were not significantly correlated. Therefore, although within each perspective there was considerable overlap, between perspectives the overlap was only weak to moderate in strength. Patients and therapists had more similar ratings of alliance than did observers with either patients or therapists. A partial explanation may be that patients and therapists are more directly involved in the group process, whereas the observers as external raters were not part of the group process. Observers also rated alliance as a group-as-a-whole phenomenon, which may be a global version of alliance when compared to individual ratings of alliance. In addition, observers may have difficulty assessing alliance, because patients may not always comment on the alliance during a session. Patients may not fully reveal the degree of connection or alliance they are experiencing with the therapist, making it difficult for observers and even therapists to assess. This underscores the importance of obtaining patient self-report of alliance as the most veridical perspective on the patient-therapist relationship, rather than only relying on therapist or observer ratings.

Overall, patients rated alliance higher at all phases of therapy than did observers or therapists. The patients reported a strong alliance with the therapist that began early in therapy, remained at the same level during the middle phase of therapy, and then increased significantly at the termination phase of therapy. There were no significant differences as a function of gender or treatment condition.

Patients consistently provided the highest alliance ratings, followed by therapists and lastly, observers. There were no differences in therapist alliance ratings as a function of phase of therapy, treatment condition, gender, or their interactions. Therapists viewed alliance as constant, unaffected by treatment condition, phase of therapy, or patient gender. By rating the alliance lower and unchanging during therapy, therapists may be underestimating the intensity of the alliance experienced by patients and also its increased strength at the termination of therapy.

Observers rated alliance differently than did therapists or patients. For observer ratings of alliance, an interaction effect occurred between treatment condition and phase of therapy. Their alliance ratings for supportive and interpretive therapy were the same at beginning therapy. However ratings then decreased for interpretive therapy at middle therapy and remained low at the termination of therapy, while for supportive therapy alliance remained unchanged from phase to phase. In conclusion, observers rated supportive therapy as superior to developing alliance than interpretive therapy. Observers likely based their alliance ratings on the degree of interaction between group members and the therapist, which is generally higher in supportive therapy as compared to interpretive therapy.

Ratings of alliance on the three subscales of the MLBS (Positive Qualities, Dissatisfaction, and Compatibility) were patient-only ratings. There were no gender differences for the MLBS subscales, which indicated that men and women produced similar ratings. The results of the analyses involving the independent variables indicated two significant main effects. Positive Qualities evidenced a linear increase across phases. Patient ratings of their therapist's positive qualities increased from beginning to middle phase and remained high in the termination phase of therapy. A treatment effect was evident for Positive Qualities (supportive > interpretive) and Dissatisfaction (supportive < interpretive). Patients in supportive therapy rated their therapist's positive qualities significantly higher than did patients in interpretive therapy. They were also more satisfied with their therapist than were patients in interpretive therapy. These patient-rated MLBS results were similar to the observer-rated AQ results just reviewed, suggesting that supportive therapy was superior to interpretive therapy in developing alliance.

Two alliance measures, AQ and MLBS, were used in this study. The results of correlation analyses indicated that patient ratings of the therapists' MLBS Positive Qualities and their ratings on the AQ were significantly and positively correlated at all three phases of therapy. Additionally, the AQ and MLBS Compatibility were significantly and positively correlated at the termination phase of therapy. These results indicated that patients equated the positive qualities and compatibility characteristics of the therapist with the quality of the alliance. Observer and therapist ratings on the AQ, relative to those of the patient, did not correlate as highly with the MLBS. This indicated that therapists' and observers' AQ ratings of alliance were not contingent upon the perceived characteristics of the therapist as were patient AQ ratings of alliance. This finding emphasizes the importance patients place on the characteristics of the therapist in evaluating their resulting alliance with the therapist. This likely also explains some of the differences in how patients, therapists, and observers rated the alliance.

In summary, alliance ratings differed between perspectives. Observers rated supportive therapy as having a greater alliance than interpretive therapy; patients rated alliance higher at the termination phase of therapy, and therapists rated alliance as unchanging, irrespective of therapy phase or treatment condition.

Result 2: Cohesion Differs Between Perspectives

The second hypothesis was that cohesion ratings from three perspectives (patient, therapist, and observer) would be equivalent. The results did not support this hypothesis.

The GCQ-S Engaged subscale, a group-as-a-whole rating, measured cohesion. Within perspectives, correlation of therapist ratings of cohesion between the beginning and middle, the middle and termination, and the beginning and termination phases of therapy showed a high degree of consistency. The same was generally true for patient and observer ratings. This indicates that ratings within each perspective over the three therapy phases overlapped.

Overall, patient ratings of cohesion were consistently higher at each phase of therapy than either therapist or observer ratings. Patient ratings of cohesion did not significantly correlate with cohesion ratings by the other perspectives. Between perspectives, only therapist and observer ratings of cohesion at the beginning and middle phases of therapy were statistically significant. This may reflect in part the therapist's and observer's "distance" from the group process, and in part the group-level focus of the ratings. The beginning phase of therapy is generally the time when cohesion is more of a focal activity of group development, but as therapy continues other group processes predominate and cohesion may become more difficult to isolate and assess in the termination phase of therapy. Certainly, the patients' ratings of cohesion indicated that they saw cohesion as stronger than did therapists and observers and did not rate cohesion in the same way across phases of therapy, as did therapists and observers.

Although observers, patients, and therapists rated cohesion similarly for both interpretive and supportive therapy at the beginning phase of therapy, it did not remain similar as therapy continued. By the middle phase of therapy, observers rated cohesion significantly higher in supportive therapy, and it remained high at the termination phase of therapy. However, for interpretive therapy, observer ratings of cohesion significantly decreased after the beginning phase of therapy and remained low at the termination phase. According to patients' ratings, cohesion increased during the course of therapy in both treatment conditions, increasing significantly from both the beginning to the middle and from the middle to the termination phase of therapy. Although patients rated the group as a whole, it is possible that the rating reflected a projection of their own feeling of identification and comfort with the group as therapy progressed. The expectation that participating in group therapy would help them with their problems may influence patients' ratings. Therapist ratings remained the same over phase of therapy and by treatment condition. Therapists' ratings reflected a stable pattern; once cohesion established itself at the beginning phase of therapy, it remained unchanged until therapy concluded. Cohesion ratings by the three perspectives thus showed marked divergence.

In summary, cohesion ratings by the three perspectives differed. Therapists rated cohesion as not changing over phase of therapy, while patients rated cohesion as increasing over phase. Neither patient nor therapist ratings indicated differences between treatment conditions, but observers rated supportive therapy as superior in developing cohesion.

Result 3: Commonalities Between Cohesion and Alliance

The third hypothesis was that cohesion and alliance are positively correlated. There was partial support for this hypothesis.

Within perspective, cohesion and alliance (AQ) ratings were positively correlated at each phase of therapy and for the overall phase average when rated by observers and by patients, but only at middle phase when rated by therapists. The observer alliance (AQ) and cohesion ratings had the highest correlation coefficients, suggesting considerable overlap in ratings. For patient ratings, the overlap between alliance (AQ) and cohesion was moderate. Therapist ratings showed very little overlap between alliance (AQ) and cohesion.

Patient ratings of alliance, using the Positive Qualities subscale of the MLBS, significantly correlated with cohesion at each phase of therapy and for the overall phase average, indicating a moderate degree of overlap. However, neither observer nor therapist ratings of cohesion were significantly related to the patient ratings of MLBS Positive Qualities.

Of all perspectives, observers had the most overlap in their ratings of alliance (AQ) and cohesion. Observers made little distinction between cohesion among group members and alliance (AQ) with the therapist. Patient ratings were next highest in terms of overlap between alliance (AQ) and cohesion, while therapists rated the two constructs as distinct. MLBS Positive Qualities had a moderate degree of overlap with both patient-rated alliance (AQ) and cohesion. These findings imply that how patients viewed their therapist's positive qualities influenced both how they appraised their alliance with the therapist and the degree of cohesion experienced with fellow group members.

Result 4: Cohesion-Alliance Similar in Beginning and Termination Therapy Phases

The fourth hypothesis was that the beginning phase of therapy would be the time of greatest association between cohesion and alliance. There was partial support for this hypothesis.

The largest correlation coefficients between alliance (AQ) and cohesion did occur at the beginning phase of therapy but also occurred at the same strength at the termination phase of therapy, for patient and observer ratings. By contrast, correlation coefficients between therapist cohesion and alliance (AQ) ratings were largest and statistically significant at the middle phase of therapy, and not significant at either the beginning or the termination phases of therapy. Using the MLBS, patient-rated alliance (MLBS Positive Qualities) and cohesion showed consistent moderate relationships across all phases of therapy.

Result 5: Alliance Predicts Outcome

The fifth hypothesis was that alliance would be a better predictor of outcome than cohesion. There was support for this hypothesis. Alliance was more consistently and frequently a significant predictor of outcome than cohesion.

In order to test this hypothesis, it was important to ascertain first whether patients improved from pre-therapy to post-therapy. Also, if there was benefit, did it maintain, deteriorate, or continue to improve 6 months after therapy. For 8 of the 14 outcome variables, there was a statistically significant improvement from pre- to post-therapy, but there was no significant further improvement from post-therapy to 6-month follow-up. The magnitude of the improvement, as indicated by effect sizes, was large for the pre- to post-therapy comparisons and small to medium for the post-therapy to 6-month follow-up comparisons. During the course of therapy, the largest effect sizes were for the grief symptom and target objective variables. After therapy had concluded, gains did not change but maintained their level at the 6-month follow-up period. Patients continued processing and working through their grief issues not only during therapy but also in the 6-month follow-up period. These data support one of the major theoretical assumptions of complicated grief therapy. That is, after overcoming obstacles that underlie complicated grief either by resolution of underlying conflicts or by the provision of support, the patient can then follow the mourning process until resolution. Possibly encouraged by the gains made during therapy, patients were able to maintain those gains after therapy. There were no significant differences between interpretive and supportive therapies so both were equally effective as therapy progressed. There were also no gender differences, so men and women benefited equally.

Using a principal components analysis, the 14 residual gain variables were reduced to two outcome factors, General Symptoms and Grief Symptoms, for each of the pre- to post-therapy and pre-therapy to 6-month follow-up comparisons. Correlating alliance and cohesion ratings across three perspectives and three phases of therapy with these outcome residual gain factors produced some interesting results. Only patient-rated alliance (AQ) at the middle, termination, and overall average phase of therapy was significantly and positively correlated with the pre- to post-therapy General and Grief Symptoms outcome residual gain factors. Patient ratings on the MLBS Dissatisfaction subscale were also associated with outcome, but only when the overall average of phases was taken were the ratings significantly correlated with the pre- to post-therapy Grief Symptoms outcome residual gain factor. When patients rated their dissatisfaction as high this was positively correlated with deterioration in general symptoms. A possible interpretation of this result is that if patients felt that they had not improved at the end of therapy, this may be reflected in a higher rating of dissatisfaction with the therapist. Dissatisfaction with the therapist throughout therapy and difficulties establishing or maintaining an alliance may have prevented certain patients from improving in their grief symptoms.

Similar to the alliance (AQ) results discussed earlier, of the three perspectives, only patient ratings of cohesion, using the Engagement scale of the GCQ-S, were significantly and positively correlated with improvement in the outcome residual gain factors. Patient ratings of cohesion at beginning phase of therapy and the overall average of phases were significantly and positively correlated with improvement in pre- to post-therapy Grief Symptoms outcome residual gain factor. Similarly, cohesion ratings in the beginning phase of therapy were significantly and positively correlated with improvement in Grief Symptoms outcome residual gain factor over the pre-therapy to 6-month follow-up interval. Higher cohesion was associated with lower symptoms only when rated by patients because cohesion ratings by the therapists or observers did not significantly correlate with outcome. The degree of cohesion in the groups mostly affected grief symptoms, rather than general symptoms. These are homogeneous groups, selected on complicated grief criteria, so the stage is set to enable the group to develop a strong cohesive bond. Perhaps cohesion reflects the criterion used to compose the group (complicated grief patients) or the group focus (insight into or support for the work of mourning). This lends support to the notion of pre-selecting groups based on common issues or goals. Development of high cohesion beginning in therapy emerged as important to successful longer term outcome.

Regression analyses were used to develop summary models of the relationships between process over phase of therapy and by perspective and outcome variables. At the beginning, middle, and termination phases of therapy it was only patient-rated process variables that predicted outcome. For the overall average of therapy phases, in addition to patient-rated process variables there was one significant result for therapist-rated process variables. This result indicated that therapist-rated alliance averaged over all phases of therapy predicted improvement in pre- to post-therapy General Symptoms outcome residual gain factor. There were no significant predictors for observer ratings.

It is clear that patient-rated process variables are superior to observer or therapist ratings in predicting patient-rated outcome. This may in part be due to a correspondence between self-report ratings (i.e., significant correlations between patient-rated outcome and patient-rated therapy process ratings due to common method). Observers and therapists did not complete outcome ratings on patients (excepting TOS-IA), but if they had their therapy process ratings may have had a greater correspondence with their ratings on outcome. However, patient-rated process variables were consistent predictors of outcome, with variations depending on phase of therapy and general or grief symptom improvement.

For patient ratings, the pre- to post-therapy General Symptoms outcome residual gain factor had no significant predictors in beginning phase of therapy, but by middle phase it was interpretive therapy, high alliance (AQ), high compatibility, and low dissatisfaction with the therapist that predicted improvement. In the termination phase of therapy, interpretive therapy along with patient-rated high alliance (AQ) and low dissatisfaction predicted improvement. In the overall average of therapy phases, again interpretive therapy, high alliance (AQ), and low dissatisfaction were the best predictors. It was not until middle therapy that interpretive therapy, alliance (AQ), and low dissatisfaction emerged as important predictors. By the middle phase of therapy, group members are doing the work of therapy. They are discussing personally sensitive issues, challenging and confronting each other, and dealing with emotional pain. Having felt the security of universality during the beginning phase of therapy individual members are now secure enough to differentiate themselves from the rest of the group. In this differentiation stage members are also relating to the therapist as an individual apart from the group. The interventions of the therapist at this point in therapy may be more directed and confrontational, having gained the trust of the group members. High alliance with the therapist at this point and maintaining this alliance to the end relates to improvement in general psychiatric symptoms. Patients see themselves as more compatible with the therapist and are satisfied.

Interestingly, the same patient-rated variables that predicted improvement in general symptoms also predicted improvement in grief symptoms. The best prediction of improvement in the pre- to post-therapy grief symptoms was patient ratings of low dissatisfaction in the beginning phase of therapy. By middle phase, patient-rated high alliance (AQ), high compatibility, and low dissatisfaction best predicted improvement. In the termination phase of therapy, high alliance (AQ) ratings best predicted improvement. For the overall average of therapy phases, it was high alliance (AQ) and low dissatisfaction that best predicted grief symptom improvement.

A common theme emerged. Similar variables predicted grief and general symptoms outcome. Patient-rated alliance (AQ), dissatisfaction, and compatibility in the middle and termination phases of therapy predicted grief symptoms as well as general symptoms outcome. It appears that there were similar mechanisms operating that affected both general and grief symptoms. That general mechanism appears to be high alliance.

There were also differences. What differentiates the General and Grief Symptoms outcome residual gain factors is that beginning therapy phase ratings of low dissatisfaction predicted improved grief symptoms outcome, whereas there were no beginning phase predictors for general symptoms. It may be that those high in dissatisfaction in beginning therapy are seeking more direction and attention from their therapist. The groups are highly homogeneous, composed of patients with complicated grief. If patients at the beginning phase of therapy begin to openly share and not avoid the issues related to their grief and do not rely on the therapist's "direction" - this results in improved grief symptoms at the termination of therapy.

The discussion to this point focused on variables that were able to predict outcome at the termination of therapy; however, the question remains as to what determines the lasting effects of therapeutic gains 6 months later. Only patient-rated process variables at the beginning phase of therapy were able to predict residual gains 6 months later. Interpretive therapy and high cohesion predicted improvement in the pre-therapy to 6-months follow-up General Symptoms outcome residual gain factor.

In general, patient-rated process variables, in particular alliance ratings, were the best predictors of outcome. However, establishing connections between group members early in therapy is important to long term outcome.

Result 6: Alliance Ratings and Outcome Similar for Men and Women

The sixth hypothesis was that men and women's alliance ratings would not be significantly different, but that group therapy outcome benefit would be greater for women and for men. This hypothesis was partly supported.

A review of the alliance and outcome data indicated no significant gender differences. Analysis of patient ratings of alliance, using the AQ and the MLBS, therapist ratings of alliance (AQ), General and Grief Symptom outcome residual gain factors, and 14 outcome variables at pre-therapy, post-therapy, and 6 month follow-up all indicated no significant gender differences. This indicates similar alliance ratings and outcome for men and women. However, the small sample of men (*n* = 20), poor power, and application of conservative Bonferroni correction may have contributed to non-significant results.

Result 7: All Improve, but Interpretive Therapy Predicts Outcome

The seventh hypothesis was that patients in both interpretive and supportive therapy would improve, but alliance and cohesion would be rated higher in supportive therapy. This hypothesis was partly supported.

There were no significant differences in outcome as a function of treatment condition (supportive and interpretive). Therefore, patients in both treatment conditions improved over time in therapy.

However, interpretive therapy was a predictor of outcome. At the middle phase of therapy, interpretive therapy along with high patient-rated alliance (AQ), high compatibility, and low dissatisfaction with the therapist predicted improvement at the completion of therapy. For the overall average of therapy phases, interpretive therapy was also one of the predictors of improvement at therapy completion. Interpretive therapy and patient-rated cohesion at the beginning phase of therapy were predictors of improvement in general symptoms from pre-therapy to 6 months follow-up.

Treatment condition did not affect patient and therapist ratings of alliance (AQ); however, treatment condition did affect observer ratings of alliance (AQ). Observers rated supportive therapy higher in alliance (AQ) than interpretive therapy. Although patient-rated AQ alliance was not significant, patient ratings of MLBS alliance indicated a treatment effect. Patients in supportive therapy rated their therapist's positive qualities significantly higher and dissatisfaction significantly lower than did patients in interpretive therapy.

Patient- and therapist-rated cohesion was unaffected by treatment condition; however for observer-rated cohesion there were significant differences between supportive and interpretive therapy. Observers rated supportive therapy higher in cohesion at the middle phase of therapy and it remained high at the termination phase of therapy, while observer cohesion ratings for interpretive therapy were lower at the middle phase of therapy and remained low at termination. Observers may have inferred that the high degree of interaction and advice giving that is characteristic of the supportive therapy technique translated into higher cohesion than for interpretive therapy, but patients' ratings did not reflect this pattern.

In summary, patients in supportive and interpretive therapy made significant improvement in symptoms over time in therapy. Interpretive therapy, in combination with patient-rated alliance and cohesion, was predictive of outcome. However, supportive therapy had higher alliance (MLBS) ratings by patients, and also higher alliance (AQ) and cohesion ratings by observers, but not by therapists.

Clinical Illustrations

The results of the current study indicate differentiation between cohesion and alliance ratings between perspectives and the ability of patient-rated alliance to explain outcome. Of clinical interest, therefore, is examining the dialogue in sessions that patients rate as high or low in alliance and conversely low or high in cohesion. Presented is the selection procedure for two sessions, followed by segments of a high alliance-low cohesion session and a high cohesion-low alliance session.

Selection Procedure

Selected were two sessions; one session depicted high alliance-low cohesion and the other depicted high cohesion-low alliance. Using patient-rated averages of alliance (AQ) and cohesion (GCQ-S Engaged subscale) the 54 sessions in the study were rank ordered. The session selected to depict high alliance-low cohesion was Session 8 in a supportive therapy group. It ranked high in average alliance (*M* = 5.38; percentile = 97) while at the same time ranked lower in average cohesion (*M* = 4.31; percentile = 51). Observers and the therapist rated this session lower in alliance than patients did, but compared to other sessions rated by observers and therapists it ranked in the upper third (*M* = 4.00, percentile = 71; *M* = 3.92, percentile = 66; respectively). Observers rated cohesion in this session lower than patients did but higher than other sessions rated by observers (*M* = 3.00, percentile = 59). On the other hand, the therapist rated cohesion in this session higher than the patients did and it had the highest cohesion rating of all sessions rated by therapists (*M* = 5.40, percentile = 100). Patients and therapist rated this session high, but the therapist rated this session as high in cohesion, whereas the patients rated it high in alliance. Both were identifying a strong session, but interestingly attributing it to different sources.

Selected fo illustrate the opposite characteristics (i.e., high cohesion and low alliance) was Session 12 of an interpretive therapy group. Patient-rated alliance was low (*M* = 3.14; percentile = 3) and at the same time cohesion was high (*M* = 4.60; percentile =

88). This session was also rated low in alliance and high in cohesion by observers (*M* = 1.58, percentile = 0; *M* = 1.20, percentile = 97; respectively) and by the therapist (*M* = 3.21; percentile = 21; *M* = 4.00, percentile = 56, respectively). There was general agreement among patients, therapist, and observers that this was a high cohesion-low alliance session.

The two sessions that were selected are not typical. They represent extremes in ranking and there are notable differences between the means in alliance and cohesion ratings. Although selected to help illustrate the concepts of alliance and cohesion, these two sessions, however, do not represent the vast majority of sessions. Most sessions had more balanced cohesion and alliance ratings. Presented first is the high alliance-low cohesion session followed by the high cohesion-low alliance session.

High Alliance-Low Cohesion Session

As previously described, Session 8 of a supportive therapy group was selected. To give an understanding of the context of Session 8, it is compared to Session 4 and 12 of the same supportive therapy group. The alliance in the fourth, eighth, and twelfth sessions of this supportive therapy group was rated by patients as having an average score of 4.54, 5.38 and 5.95, respectively. Sessions 8 and 12 of this supportive psychotherapy group had the highest average ratings of alliance, higher than all 54 sessions in the current study. The average patient-rated cohesion scores for Sessions 4, 8, and 12 were 4.46, 4.31, and 4.96, respectively. Because Session 8 had a high alliance and a lower cohesion score, segments from this session were selected.

The eighth session of this supportive psychotherapy group begins with a discussion of the cold weather, recent vacations, and visits with family, how useful these were, but that they also stirred up feelings. There was discussion about a brother who committed suicide, how helpful "adopted" mothers were to group members, and how a brother had a difficult time with the death of their mother. The therapist intervened at various points and made summary statements such as: change is difficult to get used to, your philosophy in life is that you have to persevere, we expect others to give us what we need but sometimes they just are not able to do so, getting another point of view is useful to putting the pieces together, and you can support but not rescue. The dialogue picks up from there, about 40 minutes into the session (See Appendix C for the narrative).

The group continued with discussion about topics such as divorce, feeling pressured into marriage too soon, and relationships with spouses and adult children. Therapist interventions included themes such as being comfortable with yourself, trusting others, working with fear, being able to talk to someone, learning to stand up for yourself, showing your grief to your children, using the skills you have learned here, asking to have your needs met, and knowing that it's all right to be angry.

In this high alliance-low cohesion session the therapist was active and used the content expressed by the patients to draw together and reinforce underlying adaptive themes, in keeping with supportive therapy technique. The therapist also engaged the participation of reticent patients by asking them questions arising from the underlying themes. The themes expressed by the patients seemed to be "on topic" and relevant to a loss group. Verbal acknowledgment by the patients occurred while the therapist was talking. This was a possible indication that they felt understood by the therapist. Feeling understood may have led to higher alliance ratings. The group members appeared to acknowledge, affirm, and work with the therapist's interventions. There seemed to be less discussion between patients. Instead, a patient would relate a story usually triggered by what a co-patient said. These stories were interspersed by responses from the therapist. Perhaps this type of exchange when patients appear to speak more to the therapist rather than to each other contributed to a lower cohesion rating, albeit a higher alliance rating.

High Cohesion-Low Alliance Session

Selected to illustrate high cohesion and low alliance was Session 12 of an interpretive therapy group. Of interest, in addition to Session 12, Sessions 4 and 8 of the same interpretive therapy group were low in alliance ratings. The fourth, eighth, and twelfth sessions were all rated by patients as having a low average alliance score of 3.43, 3.18, and 3.14, respectively. These scores were among the lowest average ratings of alliance, compared to all 54 sessions in the study. Sessions 4 and 8 of this interpretive psychotherapy group also had among the lowest patient-rated cohesion score of all 54 sessions, an average of 3.46 and 3.87, respectively. However, by contrast, Session 12's cohesion rating at 4.60 was among the highest average patient-rated cohesion ratings. Presented, as an illustration of patient-rated high cohesion and low alliance, are segments of this 12th and final interpretive therapy session.

The final session of this interpretive psychotherapy group begins with a patient saying that it would be nice if the therapist would start a session by asking or saying something. The implication is that this has not been the therapist's pattern and the patient was hoping that the therapist would finally indulge them given that this was the last opportunity to do so. A long period of silence and tension followed this comment. The group then attempted to address some of the emotions they had about group termination. They expressed their thoughts about not coming today and not wanting to see it end. They wanted to know if they "passed" their therapy and expressed a wish to get more support from the therapist. They persisted in attempts to have the therapist answer all their questions, a theme unfulfilled in past sessions and a source of frustration for them. They expressed fantasies of continuing the group in some other way so that it would not really end. After about 40 minutes into the 90-minute session, the following dialogue occurred (see Appendix D).

In this high cohesion and low alliance session, the tension and anger appeared to be mounting from previous sessions. The group expressed seeming unity in their disappointment in not having their needs met through this group. They were now at their final session and did not feel that they accomplished what they wanted to accomplish. The patients saw the therapist as depriving them of answers and help. This likely led to low alliance. The group seemed to focus on the therapist as the source of their frustration, in that way avoiding other issues, such as therapy termination. The group appeared to be united in confronting the therapist about issues such as the perceived uselessness of the therapy. On two occasions in the selected narrative, a patient took a spokesperson role for the whole group by saying "we think" but then immediately changing it to "I think." When group members venture to speak for the whole group, this may reflect the cohesiveness felt by group members.

DISCUSSION

Overview

Although group psychotherapy is a well-established efficacious treatment modality, what is less known is why or how it works. Over its 100-year history, group psychotherapy application is to a broad variety of clinical populations and it is diverse in theoretical orientation. In general, research findings support the efficacy of group psychotherapy irrespective of clinical population or theoretical orientation. It is also equally efficacious as individual psychotherapy (Orlinsky et al., 1994; Piper, 1993). This motivated researchers to embark on a search for the "Holy Grail," those common therapeutic factors that account for why and how group psychotherapy works. However, there is some debate about the validity of this search. Some researchers contend that the process of psychotherapy would not be expected to correlate with outcome due to the fluctuating "dose" or intervention delivered by the therapist in response to what is needed by different patients (Stiles & Shapiro, 1994). A compromise approach was undertaken by examining overall picture first (i.e., common factors of cohesion and alliance) and then focusing on the details such as therapist responsiveness, as proposed by Stiles and Shapiro.

Of the many therapeutic factors, cohesion is among those universally valued, long considered an important therapeutic factor contributing to the success of group psychotherapy (Crouch et al., 1994; Yalom, 1975). Although often defined as the group member-to-group member or group-as-a-whole relationship, plaguing the cohesion research literature is definition and measurement problems. This makes integration of results across studies difficult. These problems may have hampered, but have not diminished, the search for common factors.

Recently, conceptualising and defining cohesion has gained ground. Attention directed toward the separate contribution of the alliance and the member-to-therapist relationship to group psychotherapy outcome occurred with these developments (Marziali et al., 1997). Well known in the individual psychotherapy literature is the contribution of alliance to outcome, but less known is the contribution of alliance to group psychotherapy. Also, relatively unknown is the relationship between two group psychotherapy constructs (alliance and cohesion). How do they develop during the course of therapy? How strongly are they associated with outcome of therapy? Do therapists, group members, and group observers rate cohesion and alliance similarly? An understanding of the relationship between alliance and cohesion, and between these variables and outcome, should ultimately contribute to the development of techniques to improve alliance or cohesion at critical stages of group development.

The current study sought to explore these questions. It focused on the interrelationship between cohesion and alliance and asked how the independent variables (patient gender and treatment condition) influenced these process ratings. Investigated were process rating changes over phase of therapy (beginning, middle, and termination) and ratings from three different perspectives (observer, patient, and therapist). Of particular interest was how these process variables related to group therapy outcome. The current study explored the distinctive contributions of cohesion and alliance to outcome in supportive and interpretive forms of short-term, time-limited, psychodynamic group psychotherapy for persons experiencing complicated grief. Group-as-a-whole cohesion was measured using patient, therapist, and observer ratings on the Engaged subscale of the Group Climate Questionnaire-Short (MacKenzie, 1983). Patient, therapist, and observer ratings on the Alliance Questions (Piper, McCallum et al., 2001) measured patient-therapist alliance. Patient and therapist ratings were individual, while observer ratings were for the group as a whole. As well, a Member-to-Leader Bond Scale (MLBS; Piper et al., 1983), completed by patients, was also used to measure patient-therapist alliance. These cohesion and alliance process measures were obtained at three phases of therapy: beginning, middle, and termination. Rating of outcome measures occurred at pre-therapy, post-therapy, and at 6-month follow-up.

Arising from the results of the current study are four main propositions. Discussed is each proposition followed by sections on clinical implications of the findings, limitations of the current study, and concluding with future research directions.

Propositions

Four main propositions emerged from the results of the current study. Some represent novel concepts for the field of group psychotherapy and would benefit from further empirical study.

Proposition 1

The first proposition is that alliance with the therapist is an essential component for successful group psychotherapy outcome, perhaps even more essential than cohesion between group members. This assertion is new to the field of group psychotherapy. This proposition supports the view that common therapeutic factors, such as alliance, are important in understanding how and why group psychotherapy works.

The basis of this proposition is patient-rated alliance at the middle and termination phases of group psychotherapy significantly accounted for outcome at termination of therapy, while patient-rated cohesion at the beginning phase of therapy significantly accounted for outcome 6 months after therapy concluded. For other perspectives, only the overall summary rating of alliance by the therapist significantly accounted for outcome. Therapist- or observer-rated alliance did not have the same relationship with outcome, indicating that it is the patient perspective that explains outcome the best. These are the most powerful findings in the current study. They are powerful because they direct attention to the therapist in a field that to this point has de-emphasized the therapist's role. These findings suggest that alliance is an essential component for successful group psychotherapy outcome. This finding is in agreement with one of the few group psychotherapy studies that explored alliance with therapist (Marziali et al., 1997). It is also a replication of the important role alliance has played in successful outcome in individual therapy (Martin et al., 2000). Although the concept of alliance is relatively new for group psychotherapy, it has long been an essential component, if not *the* essential component, in individual psychotherapy. The findings of the current study serve to redirect group psychotherapy research attention to exploring the alliance and discovering what aspect of the alliance is important for success in group therapy.

While downplaying the impact of the therapist-patient alliance relationship, the group psychotherapy literature has emphasized therapeutic factors and in particular, cohesion. Therapeutic factors are important for group psychotherapy, as reviewed earlier, but so far there is little evidence for a significant relationship between most therapeutic factors and outcome. Notably, mention of the therapist is absent in discussions of therapeutic factors. The current study findings support a relationship between alliance and outcome. This serves to draw attention to the role of the therapist, not only as a group member or defined as part of group cohesion as the literature suggests, but as having a distinct relationship (i.e., alliance) with each group member. This adds support to multidimensional definitions of cohesion that have identified distinct relationships in a group (Cota & Evans, 1995). Multidimensional definitions should include all combinations of relationships, such as between each group member, between each group member and the group as a whole (including and excluding the therapist), and between each group member and the therapist. Comparing these dimensions to outcome in a future study would be useful in determining which aspect is most powerful in explaining outcome. In addition to exploring alliance and cohesion for theoretical interest, the relationship of alliance and cohesion to outcome is important for practical reasons.

One practical reason for gaining understanding of the relationship between alliance, cohesion, and outcome is that an accumulation of research findings helps determine best clinical practice standards and directs clinicians and those funding healthcare to the most cost-effective therapies to implement. If making best practice and funding decisions today based on the current research, which de-emphasizes the therapist, a conclusion may be that groups do not require a therapist. This is attractive to some reviewers as leaderless groups may reduce cost and increase accessibility of services. Indeed, there has been success in leaderless groups, but overall there is an impasse of negative, neutral, and positive findings (Desmond & Seligman, 1977). Would these groups be even more effective if led by therapists? By drawing attention to the importance of alliance with the therapist in relation to successful outcome, the current study results alert clinicians and funding bodies to consider the therapeutic role of the therapist.

This main finding of alliance accounting for outcome in the current study is especially potent in view of the population under investigation. People experiencing complicated grief have difficulties establishing trusting relationships. The experienced loss of a loved one or loved ones through death and the difficulty in establishing trust stems from dependency and ambivalence towards the lost person (Bonanno et al., 2002; Horowitz et al., 1993). This creates challenges in establishing a relationship with the therapist. In psychoanalytic terms, people experiencing complicated grief come to therapy with a negative transference. They may be distrustful of the therapist, perhaps disillusioned with the medical profession that was unable to save their loved one, a profession now represented by the therapist. In spite of this, they overcame the negative transference, and developed an alliance with the therapist. It could be argued that the transference relationship, positive or negative, is part of or is influenced by the alliance. The high alliance-low cohesion session narrative presented earlier illustrates how the therapist was able to develop an alliance and maintain the group even though cohesion was low. The challenge to carry the group through to successful completion was accomplished. Of interest, the therapist rated this session as high in cohesion rather than high in alliance, perhaps unaware of the impact he/she had on the group. A reminder of the type of population in the current study serves to emphasize the potency of these results.

Although patient-rated alliance was key in explaining outcome, patient-rated cohesion also played a role in explaining outcome. While high alliance at middle and termination phases of therapy accounted for successful outcome at the termination of therapy, high cohesion and interpretive therapy at the beginning phase of therapy accounted for successful outcome 6 months after therapy was completed. It is apparent that high levels of cohesion developed at the beginning phase of therapy have lasting effects 6 months later. The results strongly suggest that cohesion is “in the eye of the beholder;” it is most useful from the patient’s perspective, because cohesion ratings by other perspectives did not explain improvement. In the high cohesion-low alliance narrative presented earlier the therapist faced the challenge of continuing a group under conditions of low alliance and under increasing pressure from group members. The group was cohesive in their focus and pressure on the therapist and also maintained cohesion even when expressing negative feelings towards one another. The therapist used interventions at a group level, perhaps capitalizing on the high levels of cohesion to bring this group to successful completion.

These process-outcome data results are an opportunity to advance a group developmental model for further empirical testing. Alliance (AQ) and cohesion (GCQ-S) are associated with the patient’s perceptions of the therapist’s Positive Qualities. Positive

Qualities subscale ratings have a bearing on the degree of cohesion established at the beginning of therapy and influence the degree of alliance throughout therapy. The regression findings emphasized cohesion at the beginning phase of therapy, accounted for sustained improvement 6 months later, while alliance and compatibility with the therapist or dissatisfaction accounted for improvement at post-therapy. The intercorrelations of the three MLBS subscales show that Positive Qualities and Dissatisfaction are negatively correlated and Positive Qualities and Compatibility are positively correlated. Therefore, patient perceptions of the Positive Qualities of the therapist are related to the development of cohesion and alliance and are key to understanding how group psychotherapy works. Cohesion is a fundamental element for group process; however, after its establishment, it may not be as influential as the patient-therapist alliance. It may be that due to the homogeneous nature of the short-term groups, cohesion is rapidly established and though it continues to increase throughout therapy, the alliance seems to be more important throughout therapy.

It is important to note that outcome measures were primarily obtained by patient self-report. When outcome is assessed from the patient's perspective certain aspects of the psychotherapy process are more salient than if therapists assessed outcome. It has been consistently found that patients' participation in therapy and the alliance as perceived by the patient is critical to the process-outcome link (Orlinsky et al., 1994). Although much of the alliance literature is based on individual psychotherapy, the results of the present study are consistent with those findings.

Proposition 2

The second proposition is that of the three perspectives (i.e., patient, therapist, and observer), the patient perspective on alliance or cohesion is most veridical. In the literature, usually the patient perspective was the only one measured, so it was not known if ratings by different perspectives would produce the same or different results (Dreschler et al., 1985). Few studies sought to compare ratings by all perspectives in one study (Lieberman et al., 1973).

Of the three perspectives, the results indicated patient ratings had the strongest relationship to outcome, although it is possible that method variance (i.e., patient ratings of both process and outcome) may have influenced the results. According to patient ratings, alliance increased at the end of therapy, while ratings of therapist positive qualities and cohesion increased over time in therapy. By contrast, therapists' ratings of cohesion and alliance did not change over time in therapy. Observers rated cohesion and alliance as decreasing in interpretive therapy and increasing in supportive therapy over time in therapy. However, there was initial difficulty in establishing interrater reliability among observers until a modified consensus method was implemented. This suggests that cohesion and alliance may not always be expressed, but may remain internal to the patient. It is difficult to obtain observer consensus on internally mediated events. This may make observer ratings impractical to implement, unless methods of detecting cohesion or alliance improve and multiple observers are available. Therefore, in retrospect it is not surprising that therapy process ratings completed by three perspectives differed. This finding is supported by Lieberman and colleagues' (1973) results.

Proposition 3

The third proposition is that patient perceptions of the alliance can be influenced through the use of supportive therapy techniques and that use of interpretive therapy techniques can also lead to successful outcome.

The basis of this proposition is interpretive therapy, along with alliance, compatibility and satisfaction, accounted for successful outcome at completion of therapy. In addition, interpretive therapy and cohesion explained outcome at 6-month follow-up. Interpretive therapy techniques encourage a patient to examine the underlying unconscious conflicts associated with their current situation and ultimately to resolve those conflicts. Use of interpretive techniques in therapy can lead to successful outcome (Piper, McCallum et al., 2001). However, supportive therapy techniques are also important.

Patients in supportive therapy rated their therapist higher in positive qualities and lower in dissatisfaction that did patients in interpretive therapy. Supportive therapy depends on the fostering of relationships in the group. This suggests the importance of connection and relationship establishment between group members early in therapy. When this trust and confidence in one another is established, the work of therapy (e.g. disclosing personal feelings and addressing difficult matters) that needs to occur as therapy progresses can be accomplished.

Supportive therapy offers a greater opportunity for therapists to gratify patients and to take a directive role (McCallum et al., 1995). These ingredients may lead to stronger alliances between patients and therapist. This is in contrast to interpretive therapy where the atmosphere is purposefully more withholding and anxiety provoking

(Piper et al., 1995). The same therapists delivered supportive therapy and interpretive therapy, so any differences in alliances with the therapist relate to the treatment condition not to the therapist. It is recognized that fluctuations in the alliance can occur as patients work through periods of idealization and disappointment with the therapist; however there appears to be merit to combining aspects of interpretive and supportive therapy to ensure that a "good enough" level of alliance is maintained throughout the course of therapy.

Proposition 4

The fourth proposition is that cohesion and alliance are different constructs, but generally both increase over the course of therapy.

The results that support this proposition are patient ratings of cohesion, which increased over time in therapy, while alliance significantly increased at the termination phase of therapy. Patient ratings of alliance and cohesion were higher at all phases of therapy than ratings by observer and therapists. The increase in alliance at the end of therapy may be an indication that patients were satisfied with therapy. They may attribute these feelings of "success" to the alliance. Patients may also attribute success to the relationship with other group members (cohesion). The strength of the alliance at the end of therapy may also contribute to success after therapy.

There is a positive correlation and a moderate degree of overlap between cohesion and alliance. However, the two constructs differ. Although significant relationships occurred between cohesion and alliance in the beginning phase of therapy, the coefficients for the termination phase of therapy were also substantial. It appears as though some differentiation occurred between cohesion and alliance at middle therapy. This differentiation is consistent with group development models. According to these models, cohesion decreases at middle therapy while conflict rises. Individualization occurs as members of a group move from a feeling of universality ("we are one") in beginning therapy to one of "we are different" by middle therapy (MacKenzie, 1998). The role of the therapist becomes more prominent during middle therapy and group members begin to challenge each other and the therapist. By the end of therapy, these conflicts decrease and the group focuses on termination issues. The expectation is that cohesion will increase as termination approaches (MacKenzie, 1998). These data suggest that there is a high-low-high pattern with respect to cohesion and alliance (AQ) correlations over phase of therapy. It is of interest to note the suggestion of a reverse pattern for MLBS alliance (Positive Qualities) and cohesion. These variables are slightly more highly correlated at middle phase rather than at the beginning or termination phases of therapy. This may reflect the prominence of the therapist's role in the middle phase of therapy as just suggested. However, it may also be that the characteristics (i.e., positive qualities) of the therapist in the middle phase of therapy may be maintaining group cohesion through what is known to be a high conflict time in therapy.

A multimethod-multitrait analysis gave some support for construct validity for patient ratings of cohesion and alliance. This finding of the validity of patient process ratings is similar to the earlier finding that patients' rating of outcome is more salient than ratings from other perspectives.

Clinical Implications

The main clinical implication is that in addition to cohesion therapists must pay attention to developing the alliance in their group psychotherapy sessions. However, therapists must rely on patients' perceptions to determine whether the alliance or cohesion requires remedial action. Therapists cannot rely on their own perceptions because their assessment may not identify a problem. A reason for this may be that patients are not bringing these issues forward for discussion in the group.

One way of obtaining feedback is asking patients to complete alliance and cohesion inventories at the conclusion of each session, reviewing the scores, and then focusing on any "deficiencies" at the next session. Difficulties with this approach are that patients may default to completing the inventory as a substitute for bringing up issues for discussion in the group and they may habituate to the inventory. Another approach may be to purposefully direct attention to alliance and cohesion issues at strategic times during the group session. It is advantageous to address and strengthen alliance and cohesion as early as possible in therapy, especially in view of their effects on outcome. Even before therapy begins, pre-group selection and pre-therapy training may improve cohesion and meeting with each patient may improve alliance. Development of the patient-therapist alliance has not been a focus in group psychotherapy, but the results indicate that this is a fruitful avenue to pursue.

The results have implications for possible methods of addressing alliance. Supportive therapy techniques and patient perceptions of the therapist's positive qualities influence how patients rate the alliance. Therapists can consider incorporating supportive techniques and displaying characteristics such as warmth and positive regard at each session. Monitoring levels of dissatisfaction may be a useful signal that alliance is affected. By incorporating supportive techniques on a routine basis it is more likely that alliance issues can be covered even if the patients do not bring them forward. Outcome is also influenced by interpretive therapy, so inclusion of interpretive therapy techniques in combination with supportive techniques may be beneficial.

Limitations

Due to certain limitations in the present study the interpretation of results should be treated with caution. Observers listened to taped audiorecordings of the sessions and were not part of the group. This would have affected their ability to observe the non-verbal interactions in the group. Alternatively, in future research, observers could rate videotaped sessions or unobtrusively rate the sessions "live." Another methodological issue with observer ratings was the group-as-a-whole ratings for AQ alliance rather than individual ratings for each patient. This may have contributed to a diminished correspondence with the therapist and patient ratings. An alternate method is for observers to provide ratings for each patient, best achieved if observers use videotaped sessions or rate sessions live. However, there were difficulties obtaining interrater reliability of observer ratings. Unless many observers are available, this approach is less practical.

Another limitation is that neither therapists nor observers completed outcome measures for patients. If they had it is possible their process ratings would have accounted for their outcome ratings, just as it did for patient-rated process and outcome. However, if therapist and observer process ratings did not account for outcome this would add greater strength to the results, (i.e., that patient-rated process and outcome is the most informative).

Another limitation is the generalization of results is limited to this specific type of psychotherapy group and client population. It would be useful to ascertain whether the results replicate in other groups and populations. If it did this would assist in establishing a developmental model of alliance and cohesion and assist in determining the factors in successful group psychotherapy outcome.

Patients who completed therapy and completed most of their forms comprised the study population. It did not include those who dropped out of therapy. It is possible that this introduced a bias. There may be alliance, cohesion, or outcome differences for treatment non-completers compared to treatment completers.

There were no significant differences between men and women in the development of alliance or cohesion, in terms of outcome, or in terms of process-outcome relationships. However, the small sample size, particularly for men, may account for this non-significant result due to insufficient power. This means that the study needs replication under identical conditions to address gender differences.

The application of the Bonferroni correction, although reducing experiment-wise error, reduced the power of finding a significant result.

The amount of outcome variance that was accounted for was not large. This implies that other factors influence the outcome of therapy. Also, multicollinearity among the predictor variables in the regression equations may lead to an overstatement of the contribution of particular variables versus other variables in explaining outcome.

Future Research Directions

Future research could focus on addressing the shortcomings, as just reviewed. Employing a parsimonious and psychometrically sound outcome measure would simplify analysis of outcome. If observer or therapist ratings are used, the observer needs to observe the group "live" or on videotape and both observer and therapist should complete outcome ratings of the patient. However, given the results of this study, a more fruitful avenue of research may be to develop more fully the constructs of alliance and cohesion in group psychotherapy from the patient perspective. Patients rated cohesion as a group-as-a-whole phenomenon. In future studies, both cohesion and alliance measured from an individual perspective at each session would be useful. The construct of alliance needs to include characteristics of the therapist and interventions used by the therapist as a means of examining what aspects of alliance contribute to successful outcome. It would also be of interest to study treatment dropouts or non-completers of therapy to investigate if perceptions of low cohesion or alliance were a factor in their decision to leave therapy. A number of questions arise. Can cohesion and alliance compensate for each other? Does outcome in high cohesion-low alliance sessions differ from high alliance-low cohesion sessions?

Exploration of the patient-therapist alliance has not been a focus of research for group psychotherapy researchers. However, the results indicate that this is a fruitful avenue to pursue. Further research into factors such as cohesion and alliance is required, as the quest to answer the question of why and how group psychotherapy works continues.

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Appendix A

Observer Rater's Guide for GCQ-S Measure (Form 1)

General Instructions for Form 1:

- FORM 1 contains 12 items, rated on a 7-point scale from 0 = "not at all" to 6 = "extremely."

- Listen to the entire 45-minute segment of the group session and rate the segment as a whole focusing on the group member discussion and also noting the therapist's interventions.

- Note the
  a) frequency of statements or questions related to the 12 items made by group members,
  b) the degree of emphasis group members make in their statements or questions (either in emotional content or in length of discussion),
  c) the number of members participating,
  d) the quality of work in the segment, and
  e) non-verbal communication

- The 7-point scale can be thought of as a combination of frequency and degree of emphasis. For example (for items worded in the positive direction), one member making one statement would be a lower rating than two or three members making four statements in total, unless either the emotional content or the length of the discussion warranted a higher rating. A rating of "6 = extremely" would be either most members participating and making a number of statements, or fewer members making a few statements but the statements showing considerable emotional content or promoting considerable discussion.

- Note that therapist interventions, therapist comments on topic relevance, importance of issues and participation level can provide information about the presence or absence of an item.

- Use your previous experience with groups as a "mental comparison" for the segment you are rating. Do not try to compare this segment with other sessions of this same group, but rather to the groups in general.

Specific Instructions for Each Item of Form 1:

Item 1.

Defined as using statements similar to one or more of: "I care, am concerned, like, appreciate, am proud of, or can identify with a group member." A group member may ask "How are you doing" or say " I was worried, wondering, or thinking about you." Members supported one another, and promoted a sense of involvement and membership (acceptance). A positive working climate was created. Liking and caring can include confronting.

Item 2.

Defined as using statements similar to "I want to understand why I do this," or talked about a past experience and how it related to the present, or other members offered the person suggestions about how a past experience related to a present situation. Members showed a cognitive understanding of the meaning of their behavior. A positive working climate was created. This is not simply giving advice, but is more open-ended, has substance, and is exploratory.

Item 3.

Defined as members not talking about issues between themselves, even after prompting by the therapist. The discussion was mainly focused on others outside of the group or their feelings about people or situations outside of the group. Topics discussed seem to be irrelevant. They avoided talking about problems. The members did not take responsibility for group work, thereby avoiding their own change process. There was no evidence of cooperation toward a therapeutic goal. The opposite of "avoiding" is defined as statements similar to: "Let's talk about what's going on between us or what is happening here with us or its good to be able to talk about what troubles me about others in this group." A member may say, "What you just said bothers me." There is a "here-and-now" focus.

Item 4.

Defined as using statements similar to: "This was needed, it may be hard to talk about but we needed to bring it up, or I feel the same way." A number of group members participated in or seemed to identify with the issue under discussion. The discussion was lively, energetic, and focused on issues important to the group. It does not have to be relevant conversation. A positive working climate was created. Of note, to differentiate between this item and item 3 a group may be having what they feel is an important discussion with lots of participation, but they may still be avoiding important issues. In this case both item 3 and item 4 may be scored high. The opposite may be someone dismissing what someone else said or keeps changing the topic; a disjointed conversation.

Item 5.

Defined as using statements such as: "I don't know what to do or asking the therapist for advice." Group members were avoiding responsibility for their own change by depending on the leader. The group may seem to be expressing a lot of helplessness, there may be a sluggish feel to the group, and there may be considerable complaining.

Item 6.

Defined as using statements in a louder annoyed tone of voice such as: "I don't like the way you ..., I don't agree with you, or Why do you always do that." Group members showed signs of interpersonal conflict and "not getting along." Such behavior is generally not wanted by group members, but can lead to further self-disclosure so that differences or difficult issues can be explored. Rate the friction between the group members – not between the members and therapist.

Item 7.

Group members were avoiding a significant encounter with other group members. They did not ask each other many questions or offer comments or suggestions. Participation was low. They may focus more on the therapist rather than on each other. The energy level was low, there was no reaction to emotional content, and there are silences and fragmentation. If one or two people monopolized the group then the rest were allowing this and were keeping their distance.

Item 8.

The members may make statements such as "You have done it this way for so long and it hasn't worked why don't you try this." Challenging and confronting one another promotes interpersonal learning. A positive working atmosphere was created. The group "stays with it" even if it is difficult. They are honest and direct.

Item 9.

Group members seemed pressured to respond in a way that would not violate group expectations of how members should behave in a group. For example, if group expectations are that showing emotion openly is not acceptable, then do group members adhere to this expectation? In this example, if they follow this group norm then group members have avoided the responsibility for their own change process by highly adhering to this group expectation. The group has created rules where rules aren't needed. There is an emphasis on everyone being the same, no risk to take a stand, members give in, the conversation is forced and stilted, there is no spontaneity, it is superficial, and the rest of the group sanctions one member.

Item 10.

Group members have openly made statements such as: "They do not trust a certain member(s), do not want anything to do with a certain member(s), or wish a certain group member(s) would no longer attend group." Group members do not generally desire this conflict, but it forces further self-disclosure and exploration of differences or difficult issues. Members may say "I'm not comfortable talking about this." Lots of silence occurs.

Item 11.

Members described critical past events, current problems, revealed hidden thoughts or feelings, or disclosed long-kept secrets. They may say "that they have not discussed this with anyone else before," or "have not talked about this with the person involved." Group members may express deep emotion and feel a sense of relief (catharsis). Self-disclosure of personal information is an acknowledgement that it is somehow related to issues that need to be addressed. High self-disclosure deepens a positive working atmosphere. The number of people talking does not affect this rating, rather look at the content and emotion.

Item 12.

Group members may make statements such as: "I'm worried, concerned, or upset about how these sessions are going, I dreaded coming here today, I don't feel comfortable here." There may be only a few members speaking in the session. The therapist may comment about the anxiety level in the group. There may be long pauses between speakers.

Appendix B

Observer Rater's Guide for AQ Measure (Form 2)

General Instructions for Form 2:

- FORM 2 contains four items, rated on a 6-point scale from 1 = "very little" to 6 = "very much."

- Listen to the entire 45-minute segment of the group session and rate the segment as a whole focusing on the group member discussion and also noting the therapist's interventions.

- Note the
  a) frequency of statements or questions related to the four items made by group members,
  b) the degree of emphasis group members make in their statements or questions (either in emotional content or in length of discussion),
  c) the number of members participating,
  d) the quality of work in the segment, and
  e) non-verbal communication

- The 6-point scale can be thought of as a combination of frequency and degree of emphasis. For example (for items worded in the positive direction), one member making one statement would be a lower rating than two or three members making four statements in total, unless either the emotional content or the length of the discussion warranted a higher rating. A rating of "6 = very much" would be either most members participating and making a number of statements, or fewer members making a few statements but the statements showing considerable emotional content or promoting considerable discussion.

- Note that the therapist's interventions, the therapist's comments on topic relevance, importance of issues, and participation level can provide information about the presence or absence of an item.

- Items 1 and 4 are to be rated from the perspective of members to the group as a whole, while items 2 and 3 are to be rated based on the interaction between members and the therapist.

- Use your previous experience with groups as a "mental comparison" for the segment you are rating. Do not try to compare this segment with other sessions of this same group, but rather to the groups in general.

Specific Instructions for Each Item of Form 2:

Item 1.

Defined as members revealing sensitive information, members coming to group with a plan of what they want to discuss, talking about something that has been bothering them for a long time, or perhaps talking about something that they have been mulling over since the last group. Members that are not talking can be construed as not bringing up issues that are important to them.

Item 2.

Defined as the members acknowledging that the therapist identified their feelings, motivations, etc. accurately. Members may say, "That's exactly right," or acknowledge with a "yes" or other form of agreement to a therapist's intervention. Members acknowledging each other are not to be included in this rating.

Item 3.

Defined as members hearing, applying, and responding to the therapist's intervention. The opposite would be a therapist's intervention that is totally ignored and the members continue to talk about whatever story they were relating.

Item 4.

Defined as the members talking about matters relevant to themselves or other group members (not about others outside the group and how they behave). The overall tone of the group is a serious attempt to discuss issues or problems and seeking to resolve them. Group members actively participate in discussions and may say something like "I never saw my problem that way before or that gave me a lot to think about." This item can be thought of as an "output" (i.e., what the members received from a session), as contrasted to Item 1, which is "input" (i.e., what members bring to a session).

Appendix C

High Alliance-Low Cohesion Narrative

The names of patients in this narrative were changed to preserve anonymity.

DOROTHY: Sometimes I just can't handle it. I am not strong and when you feel that way, you think that your world is just the end for you.

THERAPIST: Do you have anybody that you can call on because I think that's what we are hearing that often times we try and bring someone in to support us sometimes it's a good choice and sometimes its not such a good choice, but anybody for you Dorothy?

DOROTHY: I have good family two brothers. They come by and they know my kids. I have very good kids. I don't have problems with them, no big, big problems with drugs or alcohol, or problems in school, never had those.

ALICE: When my son grew up raised by a single parent usually he would have just dropped out.

THERAPIST: I'm not sure that's a very accurate statement and it think it sort of says…

ALICE: (interrupting) To me, to me, what I see in our society and my lifestyle that I had with him I feel that he should have not have turned out that good.

THERAPIST: Maybe you offered something that you are not aware of or not giving yourself enough credit for, because I think what we are hearing is that being able to talk and be open and being able to hear your kids' anger as well as their sadness as well as their joy, its really important. (Dorothy in the background saying "Yah.")

ALICE: In setting some kind of example…. you were wondering where…it was the honesty, the honesty, that was really, really important, not to be afraid to talk to me about anything. Of course, he is not going to talk to me about anything, but he knew that there weren't any consequences. He was honest. Even if he did something wrong I would make light of it because I would point out at least you came and you opened up or were honest about it and that there is nothing that you can't deal with. Whether you like it or not everything could be dealt with. (Dorothy in background, saying "Yah.")

CAROL: It's good being open to talk at that age I think. If you, our children, or I had someone to talk to that's a big difference. It's as if Dad could not talk anything about Mom's death, after she went. The only things we ever heard about were the bills. Blue Cross was just coming in that year I think they got her two months off the four and a half months she was in hospital. He sold the last piece of land for my wedding and he said he could pay off the last of Mom's cancer bills then.

THERAPIST: Which probably is not very helpful to a young child.

CAROL: That's all we heard. We didn't know about anything else other than paying off the bills. I opened a box of…well he gave them to me…a box of cards people had written to my mother. I read them. One person's trying to talk to her about Jesus and things like that. I remember that particular one. I don't remember the others very well. They gave me those, which ended up with my sister in the end. But here I was 15 and trying to deal with all this stuff plus mom's death, plus that, plus this, plus that. It just went on and on and on.

JOAN: That's what this girl said to me, too, on the phone. She was 15 at the time. She phoned me up and was talking about all these problems that she was having and I'm going "yah" I can really relate to all this stuff. She said "but Joan, I'm 15." And that hit me and I go "Yup, that is sad." But it's true and sad.

CAROL: I didn't even have anyone to say that to. There was just nobody there. Such a complete blank wall now. When I look back now, I don't know, I just sort of drifted through it.

THERAPIST: Its so tragic to have those kind of horrible experiences, but in some ways of course its never any easier and I'm thinking about the two of you with some of the losses later in your lives, as well. How easy it is for you to talk to your new husband about where you are at and how you are doing?

JOAN: I think he is trying to change me. I don't know how to fight back.

THERAPIST: You may have some experts in this room. Any thoughts for Joan?

SUSAN: I think she has to do what she feels is right.

THERAPIST: Then let her know!

SUSAN: If you don't feel like its right, then don't buy into it. Do you agree?

JOAN: Aha.

SUSAN: It takes being a well person to do that, so you have to take care of your health first. I found that once I was starting to get well I was able to stand on my own two feet and feeling better about me, and what choices I do make. If you are feeling insecure, you are not sure about the choices you are making.

Appendix D

High Cohesion-Low Alliance Narrative

The names of patients in this narrative were changed to preserve anonymity.

HENRY: After 12 sessions is this the normal ending?

THERAPIST: There are feelings behind that question. Can you put it into words?

HENRY: Nope.

THERAPIST: Are you saying you won't or you can't?

HENRY: I won't. (Laughter from group members)

THERAPIST: There are feelings behind your stoic refusal to cooperate, what are they?

HENRY: (pause) I don't know.

ANNA: I think he is stubborn at this point.

THERAPIST: He is being stubborn, but I don't know what is he feeling. What do you imagine he is feeling?

ANNA: Maybe a little bit resentful I think because he keeps on asking and asking and he is not getting anywhere.

THERAPIST: But he sets himself up, right? It has become blatantly obvious to everybody that this isn't the kind of therapy where questions get answered. He's a bright guy, but week after week, he sets himself up to feel whatever he feels when this happens. I don't know what it is. You are thinking its resentment, that he is resenting something. Trying to deal with some….

ANNA: (interrupting) I don't know. I could not think of a better word.

PATRICIA: Do all therapists have that same policy or is it that you just won't answer questions?

THERAPIST: What's behind your question?

PATRICIA: It's weird. (Laughter from group members)

THERAPIST: But what do you feel?

PATRICIA: I feel a little bit frustrated about it because I sort of hoped that I would have more answers, more prompting, more verbal understanding.

JOYCE: And maybe even direction.

PATRICIA: Direction like, you go home, do this or do that, you know, if that would help (chuckle).

THERAPIST: Is this what's behind your questioning, too? Some of this stuff? (Directed at Henry but no response).

JOYCE: What do you mean by normal? Do you think every session runs the same way?

HENRY: I have no idea. I have never been involved in anything like this.

JOYCE: I'm just wondering about the word "normal."

HENRY: Well, I have no idea. Whether this is what happens or…(pause)

THERAPIST: You keep speculating about what you think is behind Henry's questions. I'm thinking a) its an extremely important question and b) because you are all in the same room and have gone through the same thing. He is dealing with something that you are all dealing with, which is why you have elected to do so unconsciously through the rest. You all have about as much hope getting an answer as Henry does, but what is it about?

PATRICIA: Maybe we think or maybe I think I would have done better in another type of group, not a research group. I'm thinking maybe if there was more feedback and interaction with the therapist, it might have been better.

THERAPIST: Are you suggesting that the group is having a hard time confronting the therapist about how useless, unhelpful (short laughter from a group member), and frustrated you might have felt with me? I am not suggesting that I was all of that all of the time.

JOYCE: But, well, there were certainly times.

THERAPIST: I'm thinking people are having a hard time dealing with that part of the group in general.

JOYCE: Maybe sometimes it bugs me when 2:30 hit, no matter what you were in the middle of you were out the door. We were in the middle of something and sometimes it took an hour to get onto a topic. I thought you should sit and listen until it was dealt with or until someone felt better.

The group continued to express their disappointment with the therapist, feeling like they had wasted their time, and that they came for help but didn't get it. Towards the end of this session (at about the 70-minute mark) issues of anger were discussed, as follows:

PATRICIA: I'm never going to let someone close to me again. I'm not going to let them. Not that they get that close anyway.

THERAPIST: Part of what I think happens inside of you to make sure that no one gets close to you again is you refuse or are unable to acknowledge how angry you are at those who left you. You keep that space inside you plugged up with some image of them that isn't complete. It's incomplete because you don't factor in the frustrating aspects of it (i.e., they left, he died, and he stopped being with you). That's what you are in danger of doing with your group and with me. If looks could kill (referring to Henry's expression towards the therapist).

JOYCE: I was thinking the exact same thing (group members raise their voices in acknowledgment).

THERAPIST: Did you see that?

JOYCE: Oh, yes (other group members echoed agreement).

THERAPIST: Were you aware of that?

HENRY: Probably.

THERAPIST: Could you put it into words now? Not yet, eh. You are getting closer.

In the last few minutes of the group, there was discussion about how words can "kill," followed by a long silence.

ANNA: You will remember me for my nasty words?

PATRICIA: I will.

THERAPIST: Will you remember her for anything else?

PATRICIA: No. No, but I liked her. I was surprised that she took what I said as derogatory.

THERAPIST: So you can see how because you couldn't put together the two pieces of this woman, the one you liked and the one that you got angry with; you are going to go away and only remember the one you got angry with.

PATRICIA: Yup.

THERAPIST: That's the exact process we have been talking about all afternoon.

PATRICIA: Mmm.

THERAPIST: You could not bring yourself to talk about how angry you were with Anna for being angry with you. You could not work it through together. So, you couldn't get back to feeling like you liked her and she got mad at you and you got mad at her and you still liked her.

PATRICIA: And that's a pattern. Burn bridges and walk away.

THERAPIST: You refuse to deal with your anger.

PATRICIA: Well, because my anger can get out of hand.

THERAPIST: That's the fear. But, you see what I'm saying. Everyone has been going around….

JOYCE: I don't confront my anger when people leave, because I don't want to burn a bridge. I always feel I burn them. So I don't probably express my anger and frustration with someone.

THERAPIST: Whether its expressed or you allow yourself to feel that's what the group has been dealing with today.

JOYCE: If you allow yourself to feel the anger that you have towards this person and you understand why you are angry will they still be able to be in your life if you accept them? I'm thinking of one particular instance….

THERAPIST: (interrupting) Ending group with another question?

JOYCE: Oh, forget it. (Laughter from group members)

THERAPIST: Could you look at why you would make that our last interaction ever in the world? Asking me questions you know I won't answer.

JOYCE: It didn't occur to me when I started. I wasn't thinking that far ahead of time. I guess I wanted to know…(paused)

THERAPIST: You wanted to give me one last chance to rescue you from your feelings…

JOYCE: (interrupting with an angry tone) Oh, read another book!

THERAPIST: You want one last chance for me to rescue you from the feelings you are having like a minute before I walk out the door. Maybe I could've redeemed myself and you and the whole group (audible sigh from Joyce) by answering one final quick question, a brilliant kind of thing that would have done it all.

JOYCE: Nope.

PATRICIA: We think…I feel we would benefit better from more interactions between the therapist and ourselves by answering our questions maybe on a more rational basis.

THERAPIST: You are angry that you didn't get enough of that.

PATRICIA: Yup. We wanted to think about it, information to think about at home and try it out. Lots of questions about our situation. Why don't other people who suffered just like we have…?

THERAPIST: (interrupting) The beauty of it is you can all remember that the last interaction in this group was an unanswered question because time is up. Enjoyed working with you. Don't forget to fill out the forms.

JOYCE: Oh all right, same old, same old, same old.

PATRICIA: Bye. Thank you.

Table 1

Patient Demographic Information by Gender

	Men ($n = 20$)		Women ($n = 79$)		Total ($N = 99$)	
	N	%	*N*	%	*N*	%
Age (in years)						
18 – 19	0	0	1	1.3	1	1.0
20 – 29	2	10.0	8	10.1	10	10.1
30 – 39	3	15.0	18	22.8	21	21.2
40 – 49	8	40.0	27	34.2	35	35.4
50 – 59	5	25.0	19	24.0	24	24.2
60 – 69	2	10.0	6	7.6	8	8.1
Marital Status						
married/common-law	8	40.0	32	40.5	40	40.4
separated/divorced	4	20.0	24	30.4	28	28.3
widowed	4	20.0	14	17.7	18	18.2
single	4	20.0	9	11.4	13	13.1
Current Employment						
full-time/part-time	12	60.0	38	48.1	50	50.6
unemployed	8	40.0	36	45.6	44	44.4
retired	0	0	4	5.1	4	4.0
no answer	0	0	1	1.3	1	1.0
Highest Education Achieved						
grade 9 or less	1	5.0	3	3.8	4	4.0
grade 10 to 12	7	35.0	39	49.4	46	46.5
technical/college	6	30.0	26	32.9	32	32.3
university/post-graduate	6	30.0	11	14.0	17	17.2

Table 2

Patient Axis I and Axis II Diagnosis (DSM-III-R) by Gender

	Men (*n* = 20)		Women (*n* = 79)		Total (*N* = 99)	
Primary Diagnosis	*N*	%	*N*	%	*N*	%
Axis I: Clinical Disorders						
major depressive disorder	15	75.0	58	73.4	73	73.7
dysthymic/depressive disorder	1	5.0	7	8.9	8	8.1
bereavement	3	15.0	4	5.1	7	7.1
adjustment disorder	0	0	4	5.1	4	4.1
bipolar disorder	0	0	2	2.5	2	2.0
other	0	0	2	2.5	2	2.0
panic disorder	1	5.0	1	1.3	2	2.0
no Axis I diagnosis	0	0	1	1.3	1	1.0
Axis II: Personality Disorders						
no Axis II diagnosis	14	70.0	48	60.8	62	62.6
dependent	0	0	15	19.0	15	15.2
not specified	3	15.0	5	6.3	8	8.1
borderline	0	0	5	6.3	5	5.0
deferred diagnosis	1	5.0	3	3.8	4	4.0
avoidant	0	0	2	2.5	2	2.0
obsessive-compulsive	2	10.0	0	0	2	2.0
histrionic	0	0	1	1.3	1	1.0

Table 3

Patient Axis III, IV, and V Diagnosis (DSM-III-R) by Gender

	Men (*n* = 20)		Women (*n* = 79)		Total (*N* = 99)	
	N	%	*N*	%	*N*	%
Axis III: General Medical Conditions	4	20.0	17	21.5	21	21.2
Axis IV: Psychosocial and Environmental Problems						
primary support group	17	85.0	46	58.2	63	63.6
occupational	2	10.0	9	11.4	11	11.1
social environment	1	5.0	6	7.6	7	7.1
other problems	0	0	5	6.3	5	5.0
economic problems	0	0	3	3.8	3	3.0
access to health care services	0	0	3	3.8	3	3.0
legal system	0	0	3	3.8	3	3.0
housing	0	0	2	2.5	2	2.0
no problems	0	0	2	2.5	2	2.0
Axis V: Global Assessment of Functioning (Code)						
71 – 80	1	5.0	2	2.5	3	3.0
61 – 70	3	15.0	21	26.5	24	24.3
51 – 60	9	45.0	39	49.4	48	48.5
41 – 50	6	30.0	15	19.0	21	21.2
31 – 40	1	5.0	0	0	1	1.0
21 – 30	0	0	1	1.3	1	1.0
11 – 20	0	0	1	1.3	1	1.0

Table 4

Principal Components Analysis of Pre- to Post-therapy Residual Gain Outcome Scores

	Varimax Rotated Component Loadings	
Therapy Outcome Residual Gain Variables	I	II
Trait Anxiety Scale	.85	.28
Beck Depression Inventory	.82	.34
Brief Symptom Inventory-Global Severity Index	.77	.29
Inventory of Interpersonal Problems	.73	.22
Life Satisfaction	-.70	-.34
Rosenberg Self-Esteem Scale	.68	.23
Target Objectives Severity-Independent Assessor	.67	.37
Social Adjustment Scale-Global Adjustment	.67	.31
Short Form-36 Health Survey-Physical Functioning	-.59	.08
Target Objectives Severity-Patient	.54	.49
Impact of Events Scale-Intrusion	.10	.88
Impact of Events Scale-Avoidance	.21	.81
Complicated Grief Factor	.23	.78
Texas Revised Inventory of Grief-Present Feelings	.41	.62
Variances	5.30	3.35

Note. Underline denotes variables associated with rotated principal component I or II.

Table 5

Principal Components Analysis of Pre-therapy to 6-month Follow-up Residual Gain Outcome Scores

	Varimax Rotated Component Loadings	
Therapy Outcome Residual Gain Variables	I	II
Impact of Events Scale-Intrusion	.89	.15
Complicated Grief Factor	.86	.16
Beck Depression Inventory	.80	.39
Texas Revised Inventory of Grief-Present Feelings	.80	.19
Impact of Events Scale-Avoidance	.77	.29
Trait Anxiety Scale	.69	.53
Life Satisfaction	-.69	-.45
Social Adjustment Scale-Global Adjustment	.67	.46
Rosenberg Self-Esteem Scale	.66	.33
Brief Symptom Inventory-Global Severity Index	.65	.56
Target Objectives Severity-Patient	.27	.76
Target Objectives Severity-Independent Assessor	.39	.73
Short Form-36 Health Survey-Physical Functioning	-.04	-.69
Inventory of Interpersonal Problems	.41	.61
Variances	6.05	3.40

Note. Underline denotes variables associated with rotated principal component I or II.

I

Table 6

Orthogonal Procrustes Rotation of Pre-therapy and 6-month Follow-up Principal Components into Pre- and Post-therapy Principal Components for 14 Residual Gain Outcome Scores

	Procrustes Rotated Component Loadings	
Therapy Outcome Residual Gain Variables	I	II
Target Objectives Severity-Independent Assessor	.81	.16
Target Objectives Severity-Patient	.81	.03
Brief Symptom Inventory-Global Severity Index	.73	.46
Trait Anxiety Scale	.71	.51
Inventory of Interpersonal Problems	.71	.21
Short Form-36 Health Survey-Physical Functioning	-.67	.16
Social Adjustment Scale-Global Adjustment	.64	.50
Life Satisfaction	-.63	-.53
Impact of Events Scale-Intrusion	.41	.81
Complicated Grief Factor	.40	.78
Texas Revised Inventory of Grief-Present Feelings	.42	.71
Beck Depression Inventory	.61	.65
Impact of Events Scale-Avoidance	.50	.65
Rosenberg Self-Esteem Scale	.51	.53
Variances	5.49	3.96

Note. Underline denotes variables associated with rotated principal component I or II.

Table 7

Descriptive Statistics, Pearson Correlations, and Paired *t* tests for 14 Pre- and Post-therapy Outcome Variables ($N = 99$)

	Pre-therapy			Post-therapy					
Variables	*M*	*SD*	Range	*M*	*SD*	Range	*r*	*t*	ES
IES-A	2.40	1.07	.25 – 5.00	1.32	1.03	.00 – 3.69	.46*	9.73*	.98
IES-I	2.65	1.07	.30 – 5.00	1.57	1.25	.00 – 4.86	.53*	9.44*	.95
TOS-P	4.10	.72	2.00 – 5.00	3.02	1.30	.00 – 5.00	.36*	8.72*	.88
CGF	1.32	.75	.00 – 3.00	.79	.75	.00 – 3.00	.63*	8.26*	.83
TOS-IA	3.96	.76	2.15 – 5.00	2.99	1.43	.00 – 5.00	.54*	7.99*	.80
TRIG-P	3.40	.71	1.60 – 4.95	2.98	.87	1.35 – 5.00	.71*	6.73*	.68
BDI	1.36	.57	.19 – 2.57	1.04	.69	.00 – 2.62	.68*	6.16*	.62
BSI-GSI	1.69	.76	.40 – 3.70	1.35	.85	.00 – 3.40	.72*	5.47*	.55
TAS	2.82	.50	1.30 – 3.90	2.55	.64	1.00 – 3.80	.60*	5.09*	.51

(table continues)

Table 7 *(continued)*

Variables	Pre-therapy			Post-therapy					
	M	*SD*	Range	*M*	*SD*	Range	*r*	*t*	ES
LS	2.93	1.26	1.00 – 6.00	3.63	1.55	1.00 – 7.00	.53*	-4.95*	.50
SAS	2.51	.53	1.70 – 4.70	2.31	.59	1.30 – 4.00	.65*	4.09*	.41
RSE	.64	.28	.00 – 1.00	.56	.36	.00 – 1.00	.63*	2.88	.29
IIP	1.52	.55	.20 – 3.00	1.44	.66	.00 – 2.60	.67*	1.62	.16
SF-36-PF	71.62	27.28	.00 – 100.00	70.74	26.99	.00 – 100.00	.72*	.43	.04

Note. IES-A = Impact of Events Scale-Avoidance; IES-I = Impact of Events Scale-Intrusion; TOS-P = Target Objectives Severity-Patient; CGF = Complicated Grief Factor; TOS-IA = Target Objectives Severity-Independent Assessor; TRIG-P = Texas Revised Inventory of Grief-Present Feelings; BDI = Beck Depression Inventory; BSI-GSI = Brief Symptom Inventory-Global Severity Index; TAS = Trait Anxiety Scale; LS = Life Satisfaction; SAS = Social Adjustment Scale; RSE = Rosenberg Self-Esteem Scale; IIP = Inventory of Interpersonal Problems; SF-36-PF = Short Form-36 Health Survey-Physical Functioning; ES = Effect Size.

Bonferroni correction applied to 14 outcome variable correlations and *t* tests ($p = .05/14 = .004$).

* $p < .004$, 2-tailed.

Table 8

Descriptive Statistics, Pearson Correlations, and Paired *t* tests for 14 Post-therapy and 6-month Follow-up Outcome Variables (*N* = 65)

	Post-therapy			6-month Follow-up					
Variables	*M*	*SD*	Range	*M*	*SD*	Range	*r*	*t*	ES
TOS-P	3.02	1.30	.00 – 5.00	2.49	1.33	.00 – 5.00	.50*	2.71	.34
TOS-IA	2.99	1.43	.00 – 5.00	2.56	1.36	.00 – 5.00	.51*	2.51	.31
LS	3.63	1.55	1.00 – 7.00	4.19	1.63	1.00 – 7.00	.52*	-2.49	.31
SAS	2.31	.59	1.30 – 4.00	2.11	.58	1.10 – 3.30	.51*	2.33	.29
TRIG-P	2.98	.87	1.35 – 5.00	2.73	.81	1.10 – 4.50	.57*	2.16	.27
CGF	.79	.75	.00 – 3.00	.58	.68	.00 – 3.00	.55*	2.14	.27
BDI	1.04	.69	.00 – 2.62	.82	.68	.00 – 2.67	.46*	1.97	.24
IES-I	1.57	1.25	.00 – 4.86	1.27	1.22	.00 – 5.00	.50*	1.94	.24
IES-A	1.32	1.03	.00 – 3.69	1.11	1.11	.00 – 4.07	.43*	1.72	.21

(table continues)

Table 8 *(continued)*

Variables	Post-therapy			6-month Follow-up					
	M	*SD*	Range	*M*	*SD*	Range	*r*	*t*	ES
IIP	1.44	.66	.00 – 2.60	1.27	.72	.00 – 2.60	.56*	1.67	.21
TAS	2.55	.64	1.00 – 3.80	2.39	.71	1.10 – 3.70	.56*	1.65	.20
BSI-GSI	1.35	.85	.00 – 3.40	1.14	.87	.00 – 2.90	.54*	1.62	.20
RSE	.56	.36	.00 – 1.00	.49	.36	.00 – 1.00	.55*	.98	.12
SF-36-PF	70.74	26.99	.00 – 100.00	74.92	25.21	15.00 – 100.00	.67*	-.84	.10

Note. TOS-P = Target Objectives Severity-Patient; TOS-IA = Target Objectives Severity-Independent Assessor; LS = Life Satisfaction; SAS = Social Adjustment Scale; TRIG-P = Texas Revised Inventory of Grief-Present Feelings; CGF = Complicated Grief Factor; BDI = Beck Depression Inventory; IES-I = Impact of Events Scale-Intrusion; IES-A = Impact of Events Scale-Avoidance; IIP = Inventory of Interpersonal Problems; TAS = Trait Anxiety Scale; BSI-GSI = Brief Symptom Inventory-Global Severity Index; RSE = Rosenberg Self-Esteem Scale; SF-36-PF = Short Form-36 Health Survey-Physical Functioning; ES = Effect Size.

Post-therapy total sample *N* was reduced to 65 from 99 due to paired sample *t* test. Bonferroni correction applied to 14 outcome variable correlations and *t* tests ($p = .05/14 = .004$).

* $p < .004$, 2-tailed.

Table 9

Male Patient Descriptive Statistics for 14 Pre-therapy, Post-therapy, and 6-month Follow-up Outcome Variables

	Pre-therapy (*n* = 20)			Post-therapy (*n* = 20)			6-month Follow-up (*n* = 13)		
Variables	*M*	*SD*	Range	*M*	*SD*	Range	*M*	*SD*	Range
BSI-GSI	1.53	.63	.40 – 2.40	1.46	.72	.20 – 2.70	1.45	1.94	.10 – 2.80
BDI	1.25	.49	.29 – 2.19	1.15	.59	.10 – 2.00	1.14	.84	.14 – 2.67
TAS	2.80	.57	1.70 – 3.60	2.65	.67	1.20 – 3.60	2.68	.76	1.40 – 3.70
SF-36-PF	69.75	25.52	15.00 – 100.00	73.75	23.35	20.00 – 100.00	70.00	25.50	25.00 – 100.00
CGF	1.25	.77	.22 – 2.90	.89	.71	.00 – 2.22	.75	.60	.00 – 1.86
IES-A	2.00	.87	.50 – 3.13	1.19	1.04	.00 – 3.25	1.51	1.40	.00 – 3.75
IES-I	2.62	1.25	.87 – 5.00	1.37	1.09	.00 – 4.29	1.37	1.15	.00 – 3.43
TRIG-P	3.25	.72	1.85 – 4.60	3.01	.87	1.50 – 5.00	2.85	.79	1.65 – 4.20
IIP	1.50	.60	.20 – 2.20	1.62	.70	.00 – 2.60	1.19	.80	.00 – 2.50

(table continues)

Table 9 *(continued)*

	Pre-therapy ($n = 20$)			Post-therapy ($n = 20$)			6-month Follow-up ($n = 13$)		
Variables	*M*	*SD*	Range	*M*	*SD*	Range	*M*	*SD*	Range
SAS	2.48	.60	1.70 – 4.10	2.39	.46	1.40 – 3.10	2.39	.67	1.10 – 3.30
RSE	.62	.32	.00 – 1.00	.65	.32	.20 – 1.00	.63	.32	.20 – 1.00
LS	2.90	1.59	1.00 – 6.00	3.12	1.43	1.00 – 6.00	3.61	1.76	2.00 – 7.00
TOS-IA	4.13	.76	2.15 – 5.00	3.44	1.12	.33 – 5.00	3.09	1.21	.43 – 4.83
TOS-P	4.02	.72	2.00 – 5.00	3.30	1.14	1.00 – 5.00	2.85	1.18	1.00 – 5.00

Note. BSI-GSI = Brief Symptom Inventory-Global Severity Index; BDI = Beck Depression Inventory; TAS = Trait Anxiety Scale; SF-36-PF = Short Form-36 Health Survey-Physical Functioning; CGF = Complicated Grief Factor; IES-A = Impact of Events Scale-Avoidance; IES-I = Impact of Events Scale-Intrusion; TRIG-P = Texas Revised Inventory of Grief-Present Feelings; IIP = Inventory of Interpersonal Problems; SAS = Social Adjustment Scale; RSE = Rosenberg Self-Esteem Scale; LS = Life Satisfaction; TOS-IA = Target Objectives Severity-Independent Assessor; TOS-P = Target Objectives Severity-Patient.

Table 10

Female Patient Descriptive Statistics for 14 Pre-therapy, Post-therapy, and 6-month Follow-up Outcome Variables

	Pre-therapy ($n = 79$)			Post-therapy ($n = 79$)			6-month Follow-up ($n = 52$)		
Variables	*M*	*SD*	Range	*M*	*SD*	Range	*M*	*SD*	Range
BSI-GSI	1.73	.79	.50 – 3.70	1.33	.88	.00 – 3.40	1.07	.82	.00 – 2.90
BDI	1.39	.59	.19 – 2.57	1.01	.72	.00 – 2.62	.75	.62	.00 – 2.43
TAS	2.82	.49	1.30 – 3.90	2.53	.63	1.00 – 3.80	2.32	.69	1.10 – 3.50
SF-36-PF	72.09	27.85	.00 – 100.00	69.97	27.92	.00 – 100.00	76.15	25.24	15.00 – 100.00
CGF	1.35	.75	.00 – 3.00	.77	.77	.00 – 3.00	.54	.70	.00 – 3.00
IES-A	2.50	1.09	.25 – 5.00	1.36	1.03	.00 – 3.69	1.01	1.01	.00 – 4.07
IES-I	2.65	1.03	.30 – 5.00	1.62	1.29	.00 – 4.86	1.25	1.24	.00 – 5.00
TRIG-P	3.44	.71	1.60 – 4.95	2.98	.87	1.35 – 4.80	2.70	.82	1.10 – 4.50
IIP	1.53	.54	.50 – 3.00	1.39	.65	.00 – 2.50	1.29	.71	.00 – 2.60

(table continues)

Table 10 *(continued)*

Variables	Pre-therapy (*n* = 79)			Post-therapy (*n* = 79)			6-month Follow-up (*n* = 52)		
	M	*SD*	Range	*M*	*SD*	Range	*M*	*SD*	Range
SAS	2.52	.52	1.70 – 4.70	2.29	.62	1.30 – 4.00	2.04	.53	1.10 – 3.20
RSE	.65	.27	.00 – 1.00	.54	.36	.00 – 1.00	.46	.36	.00 – 1.00
LS	2.94	1.18	1.00 – 5.00	3.75	1.57	1.00 – 7.00	4.33	1.59	1.00 – 7.00
TOS-IA	3.92	.75	2.42 – 5.00	2.88	1.48	.00 – 5.00	2.43	1.37	.00 – 5.00
TOS-P	4.12	.72	2.33 – 5.00	2.95	1.33	.00 – 5.00	2.40	1.36	.00 – 5.00

Note. BSI-GSI = Brief Symptom Inventory-Global Severity Index; BDI = Beck Depression Inventory; TAS = Trait Anxiety Scale; SF-36-PF = Short Form-36 Health Survey-Physical Functioning; CGF = Complicated Grief Factor; IES-A = Impact of Events Scale-Avoidance; IES-I = Impact of Events Scale-Intrusion; TRIG-P = Texas Revised Inventory of Grief-Present Feelings; IIP = Inventory of Interpersonal Problems; SAS = Social Adjustment Scale; RSE = Rosenberg Self-Esteem Scale; LS = Life Satisfaction; TOS-IA = Target Objectives Severity-Independent Assessor; TOS-P = Target Objectives Severity-Patient.

Table 11

Supportive Therapy Descriptive Statistics for 14 Pre-therapy, Post-therapy, and 6-month Follow-up Outcome Variables

	Pre-therapy ($n = 52$)			Post-therapy ($n = 52$)			6-month Follow-up ($n = 32$)		
Variables	*M*	*SD*	Range	*M*	*SD*	Range	*M*	*SD*	Range
BSI-GSI	1.63	.70	.40 – 3.40	1.41	.71	.10 – 2.70	1.29	.85	.00 – 2.90
BDI	1.40	.54	.19 – 2.52	1.13	.64	.00 – 2.62	.90	.61	.00 – 1.95
TAS	2.86	.50	1.30 – 3.90	2.64	.61	1.10 – 3.60	2.56	.69	1.10 – 3.50
SF-36-PF	67.31	26.76	.00 – 100.00	69.25	26.48	.10 – 100.00	69.53	25.51	20.00 – 100.00
CGF	1.29	.73	.00 – 3.00	.79	.74	.00 – 3.00	.64	.73	.00 – 3.00
IES-A	2.31	1.05	.25 – 4.40	1.24	.92	.00 – 3.40	1.08	.98	.00 – 2.75
IES-I	2.45	1.08	.30 – 5.00	1.48	1.10	.00 – 4.40	1.28	1.12	.00 – 3.57
TRIG-P	3.35	.66	1.60 – 4.95	2.99	.81	1.35 – 5.00	2.81	.80	1.30 – 4.50
IIP	1.58	.51	.50 – 2.90	1.58	.65	.00 – 2.60	1.49	.72	.00 – 2.60

(table continues)

Table 11 *(continued)*

Variables	Pre-therapy ($n = 52$)			Post-therapy ($n = 52$)			6-month Follow-up ($n = 32$)		
	M	*SD*	Range	*M*	*SD*	Range	*M*	*SD*	Range
SAS	2.51	.43	1.80 – 3.80	2.40	.52	1.40 – 3.50	2.18	.59	1.10 – 3.30
RSE	.67	.26	.00 – 1.00	.63	.32	.00 – 1.00	.56	.37	.00 – 1.00
LS	2.87	1.35	1.00 – 6.00	3.53	1.41	1.00 – 6.00	3.88	1.64	1.00 – 7.00
TOS-IA	4.01	.72	2.42 – 5.00	3.14	1.37	.13 – 5.00	2.71	1.46	.17 – 5.00
TOS-P	4.13	.68	2.33 – 5.00	3.16	1.22	.33 – 5.00	2.54	1.35	.00 – 5.00

Note. BSI-GSI = Brief Symptom Inventory-Global Severity Index; BDI = Beck Depression Inventory; TAS = Trait Anxiety Scale; SF-36-PF = Short Form-36 Health Survey-Physical Functioning; CGF = Complicated Grief Factor; IES-A = Impact of Events Scale-Avoidance; IES-I = Impact of Events Scale-Intrusion; TRIG-P = Texas Revised Inventory of Grief-Present Feelings; IIP = Inventory of Interpersonal Problems; SAS = Social Adjustment Scale; RSE = Rosenberg Self-Esteem Scale; LS = Life Satisfaction; TOS-IA = Target Objectives Severity-Independent Assessor; TOS-P = Target Objectives Severity-Patient.

Table 12

Interpretive Therapy Descriptive Statistics for 14 Pre-therapy, Post-therapy, and 6-month Follow-up Outcome Variables

	Pre-therapy ($n = 47$)			Post-therapy ($n = 47$)			6-month Follow-up ($n = 33$)		
Variables	*M*	*SD*	Range	*M*	*SD*	Range	*M*	*SD*	Range
BSI-GSI	1.75	.83	.50 – 3.70	1.29	.98	.00 – 3.40	1.00	.88	.00 – 2.90
BDI	1.32	.61	.29 – 2.57	.94	.73	.00 – 2.52	.75	.75	.00 – 2.67
TAS	2.77	.51	1.60 – 3.80	2.45	.66	1.00 – 3.80	2.22	.71	1.10 – 3.70
SF-36-PF	76.38	27.34	.00 – 100.00	72.38	27.73	.00 – 100.00	80.15	24.16	15.00 – 100.00
CGF	1.36	.79	.28 – 2.90	.80	.78	.00 – 2.57	.52	.64	.00 – 2.71
IES-A	2.49	1.09	.30 – 5.00	1.42	1.14	.00 – 3.69	1.14	1.23	.00 – 4.07
IES-I	2.86	1.03	.50 – 5.00	1.67	1.40	.00 – 4.86	1.27	1.33	.00 – 5.00
TRIG-P	3.45	.77	1.85 – 4.85	2.97	.94	1.35 – 4.65	2.66	.83	1.10 – 4.40
IIP	1.46	.59	.20 – 3.00	1.29	.66	.00 – 2.40	1.05	.66	.00 – 2.40

(table continues)

Table 12 *(continued)*

	Pre-therapy (*n* = 47)			Post-therapy (*n* = 47)			6-month Follow-up (*n* = 33)		
Variables	*M*	*SD*	Range	*M*	*SD*	Range	*M*	*SD*	Range
SAS	2.51	.63	1.70 – 4.70	2.21	.66	1.30 – 4.00	2.03	.56	1.10 – 3.20
RSE	.61	.31	.00 – 1.00	.49	.38	.00 – 1.00	.43	.34	.00 – 1.00
LS	3.00	1.16	1.00 – 5.00	3.73	1.71	1.00 – 7.00	4.49	1.59	2.00 – 7.00
TOS-IA	3.90	.80	2.15 – 5.00	2.83	1.49	.00 – 5.00	2.42	1.25	.00 – 4.92
TOS-P	4.06	.76	2.00 – 5.00	2.87	1.38	.00 – 5.00	2.44	1.32	.00 – 5.00

Note. BSI-GSI = Brief Symptom Inventory-Global Severity Index; BDI = Beck Depression Inventory; TAS = Trait Anxiety Scale; SF-36-PF = Short Form-36 Health Survey-Physical Functioning; CGF = Complicated Grief Factor; IES-A = Impact of Events Scale-Avoidance; IES-I = Impact of Events Scale-Intrusion; TRIG-P = Texas Revised Inventory of Grief-Present Feelings; IIP = Inventory of Interpersonal Problems; SAS = Social Adjustment Scale; RSE = Rosenberg Self-Esteem Scale; LS = Life Satisfaction; TOS-IA = Target Objectives Severity-Independent Assessor; TOS-P = Target Objectives Severity-Patient.

Table 13

2 Time (Pre-therapy, Post-therapy) X 2 Treatment Condition (Interpretive, Supportive) X 2 Gender (Male, Female) Analysis of Variance for 14 Outcome Variables ($N = 99$)

	F													
Source	BSI	BDI	TAS	SF36	CGF	IES-A	IES-I	TRIG	IIP	SAS	RSE	LS	TOS-IA	TOS-P
	Between subjects													
C	.15	.27	1.23	1.65	.13	.87	1.94	.26	7.69	.07	.34	1.53	.01	.49
G	.12	.00	.00	.23	.03	1.14	.01	.03	.10	.09	.32	3.04	3.00	.17
C X G	.32	.31	.02	.28	.04	.29	.27	.37	4.35	.43	1.24	6.26	1.19	.00
	Within subjects													
T	8.44	10.33*	8.96*	.00	34.33*	40.85*	63.13*	25.64*	.00	7.76	1.21	8.15	27.52*	32.27*
T X C	.51	.01	.02	1.59	.96	.21	2.25	3.21	.21	2.46	.31	.02	.04	.09
T X G	4.35	5.22	1.42	.60	.78	1.66	1.42	.35	4.24	.48	3.22	2.19	1.23	1.87
T X C X G	.78	.86	.89	.21	1.57	.20	.90	3.59	.74	.09	.09	.07	.19	.07

Note. Degrees of freedom = 1. Separate analysis of variance conducted for each variable. C = treatment condition; G = gender; T = time; BSI = Brief Symptom Inventory-Global Severity Index; BDI = Beck Depression Inventory; TAS = Trait Anxiety Scale; SF36 = Short Form-36 Health Survey-Physical Functioning; CGF = Complicated Grief Factor; IES-A = Impact of Events Scale-Avoidance; IES-I = Impact of Events Scale-Intrusion; TRIG = Texas Revised Inventory of Grief-Present Feelings; IIP = Inventory of Interpersonal Problems; SAS = Social Adjustment Scale; RSE = Rosenberg Self-Esteem Scale; LS = Life Satisfaction; TOS-IA = Target Objectives Severity-Independent Assessor; TOS-P = Target Objectives Severity-Patient.

* $p < .004$, 2-tailed, after Bonferroni correction ($p = .05/14$ outcome variables = .004).

Table 14

2 Time (Post-therapy, 6-month Follow-up) X 2 Treatment Condition (Interpretive, Supportive) X 2 Gender (Male, Female) Analysis of Variance for 14 Outcome Variables ($N = 65$)

	F													
Source	BSI	BDI	TAS	SF36	CGF	IES-A	IES-I	TRIG	IIP	SAS	RSE	LS	TOS-IA	TOS-P
	Between subjects													
C	.83	.22	2.24	.60	.00	.29	.00	.04	7.52	1.06	.54	.02	.07	.17
G	1.03	2.26	1.91	.06	.10	.43	.13	.00	.00	2.58	2.19	4.44	2.82	1.40
C X G	.32	.04	.00	.00	.03	.10	.07	.05	2.36	.15	.45	2.24	.83	.02
	Within subjects													
T	.58	.95	.57	.47	.97	.14	.77	1.11	4.56	1.66	.32	5.80	3.58	4.41
T X C	1.61	.84	.40	2.88	1.57	.49	1.26	1.20	.71	.25	.55	.87	.08	.19
T X G	.77	1.08	.83	5.33	1.50	2.98	1.40	1.32	1.88	.91	.14	.54	.03	.00
T X C X G	.08	1.05	.11	.26	.28	.79	1.31	.77	.08	.37	.40	.27	.48	.01

Note. Degrees of freedom = 1. Separate analysis of variance conducted for each variable. C = treatment condition; G = gender; T = time; BSI = Brief Symptom Inventory-Global Severity Index; BDI = Beck Depression Inventory; TAS = Trait Anxiety Scale; SF36 = Short Form-36 Health Survey-Physical Functioning; CGF = Complicated Grief Factor; IES-A = Impact of Events Scale-Avoidance; IES-I = Impact of Events Scale-Intrusion; TRIG = Texas Revised Inventory of Grief-Present Feelings; IIP = Inventory of Interpersonal Problems; SAS = Social Adjustment Scale; RSE = Rosenberg Self-Esteem Scale; LS = Life Satisfaction; TOS-IA = Target Objectives Severity-Independent Assessor; TOS-P = Target Objectives Severity-Patient.

* $p < .004$, 2-tailed, after Bonferroni correction ($p = .05/14$ outcome variables = .004).

Table 15

Descriptive Statistics for the Alliance Questions Measure, by Perspective and Phase of Therapy

Alliance Questions	*M*	*SD*	*N*	Range
Observer				
Beginning	3.52	.89	96	1.58 – 5.17
Middle	3.43	.83	99	1.75 – 4.58
Termination	3.41	.98	99	1.58 – 4.92
Overall Average	3.45	.74	99	2.06 – 4.33
Patient				
Beginning	3.93	1.04	90	1.00 – 6.00
Middle	4.01	1.24	91	1.00 – 6.00
Termination	4.45	1.26	95	1.25 – 6.00
Overall Average	4.10	.99	99	1.42 – 6.00
Therapist				
Beginning	3.63	.96	87	1.00 – 5.50
Middle	3.54	1.06	91	1.00 – 5.25
Termination	3.67	1.03	95	1.00 – 6.00
Overall Average	3.60	.82	99	1.00 – 5.17

Table 16

Descriptive Statistics and *t* tests for the Alliance Questions Measure, by Gender, Perspective and Phase of Therapy

	Men				Women					
Alliance Questions	*M*	*SD*	Range	*n*	*M*	*SD*	Range	*n*	*t*	*p*
Patient –Beginning	3.95	1.09	1.25 – 5.75	19	3.92	1.03	1.00 – 6.00	71	.08	.93
Middle	4.02	1.46	1.00 – 6.00	18	4.00	1.19	1.50 – 6.00	73	.07	.94
Termination	4.30	1.45	1.25 – 6.00	19	4.49	1.22	1.75 – 6.00	76	-.59	.56
Average	4.07	1.23	1.42 – 5.83	20	4.11	.92	2.17 – 6.00	79	-.16	.87
Therapist –Beginning	3.49	.93	2.00 – 5.50	19	3.67	.97	1.00 – 5.25	68	-.74	.46
Middle	3.39	.98	1.00 – 4.75	18	3.58	1.08	1.00 – 5.25	73	-.67	.51
Termination	3.56	1.26	1.00 – 5.25	19	3.70	.97	1.50 – 6.00	76	-.52	.60
Average	3.45	.95	1.00 – 5.17	20	3.64	.78	1.75 – 5.17	79	-.97	.34

Note. Descriptive statistics for observer ratings were not included because they were for group-as-a-whole, not individuals.
* $p < .006$, 2-tailed, after Bonferroni correction ($p = .05/8$ variables = .006).

Table 17

Descriptive Statistics and *t* tests for the Alliance Questions Measure, by Treatment Condition, Perspective, and Phase of Therapy

	Supportive				Interpretive					
Alliance Questions	*M*	*SD*	Range	*n*	*M*	*SD*	Range	*n*	*t*	*p*
Observer –Beginning	3.69	.94	1.58 – 5.17	52	3.32	.79	1.75 – 4.25	44	2.06	.04
Middle	3.90	.58	2.50 – 4.58	52	2.91	.75	1.75 – 4.33	47	7.30	.00*
Termination	3.95	.65	2.75 – 4.92	52	2.81	.94	1.58 – 4.75	47	7.13	.00*
Average	3.85	.51	2.50 – 4.22	52	3.01	.71	2.06 – 4.33	47	6.77	.00*
Patient –Beginning	4.05	1.05	1.25 – 5.75	47	3.80	1.03	1.00 – 6.00	43	1.16	.25
Middle	4.11	1.27	1.00 – 6.00	48	3.88	1.20	2.00 – 6.00	43	.91	.37
Termination	4.76	1.16	1.25 – 6.00	50	4.12	1.30	1.75 – 6.00	45	2.56	.01
Average	4.29	.99	1.42 – 5.83	52	3.89	.96	2.00 – 6.00	47	2.06	.04
Therapist –Beginning	3.73	.91	1.50 – 5.25	48	3.51	1.00	1.00 – 5.50	39	1.04	.30
Middle	3.63	.83	1.25 – 5.00	48	3.44	1.27	1.00 – 5.25	43	.82	.41
Termination	3.81	.91	1.25 – 5.00	50	3.51	1.13	1.00 – 6.00	45	1.45	.15
Average	3.72	.66	2.25 – 5.00	52	3.48	.95	1.00 – 5.17	47	1.49	.14

Note. * $p < .004$, 2-tailed, after Bonferroni correction ($p = .05/12$ variables = .004).

Table 18

Intercorrelations for the Alliance Questions Measure (AQ) Between Perspectives and Across Phases of Therapy ($N = 79 - 99$)

	AQ											
	Observer				Patient				Therapist			
AQ	Begin	Mid	Term	Average	Begin	Mid	Term	Average	Begin	Mid	Term	Average
Observer –Begin	--	.55	.30	.74* (.45*)	.21	.14	.28	.24	.14	.25	.15	.19
Mid		--	.72*	.91* (.79*)	.13	.06	.24*	.18	-.02	.28	.26*	.19
Term			--	.83* (.57*)	.09	.03	.18	.12	-.02	.29*	.28	.23
Av				--	.16	.09	.28*	.22	.00	.33*	.28	.25
Patient –Begin					--	.47*	.56*	.79* (.60*)	.46*	.12	.31*	.39*
Mid						--	.62*	.85* (.65*)	.20	.24	.27	.31*
Term							--	.88* (.71*)	.22	.26	.43*	.41*
Av								--	.35*	.27	.41*	.46*
Therapist –Begin									--	.23	.43*	.75* (.38*)
Mid										--	.44*	.77* (.39*)
Term											--	.83* (.52*)

Note. The values in parentheses denote r when duplication is removed. Underlining denotes 12 therapy phase intercorrelations and application of Bonferroni correction ($p = .05/12 = .004$). Begin = Beginning; Mid = Middle; Term = Termination; Av = Average.
* $p < .004$, 2-tailed.

Table 19

2 Gender (Male, Female) X 2 Treatment Condition (Interpretive, Supportive) Analysis of Variance for the Alliance Questions Measure, for Each Perspective (*N* = 74)

		F		
Source	*df*	Observer[a]	Patient	Therapist
		Between subjects		
Condition (C)	1	45.52**	.46	.35
Gender (G)	1		.12	.12
C X G	1		.53	.37
S within-group error	70	(1.14)	(2.96)	(1.61)
		Within subjects		
Phase (P)	2	1.58	6.67**	.86
P X C	2	12.11**	2.23	.36
P X G	2		1.00	.59
P X C X G	2		1.42	.74
P X S within-group error	140	(.36)	(.58)	(.62)

Note. Values in parentheses represent mean square errors. S = subjects.

[a] Separate ANOVA conducted excluding gender because of group-as-a-whole rating method by observers, *N* = 96, *df* = 1, 94 (between); 2, 188 (within).

* $p < .05$ and ** $p < .005$, 2-tailed.

Table 20

Alliance Measure (AQ) – Outcome Correlations by Perspective and Phase of Therapy

		Pre- to Post-therapy ($N = 87 – 99$)		Pre-therapy to 6-mo FU ($N = 56 – 65$)	
Alliance Questions		General Symptoms	Grief Symptoms	General Symptoms	Grief Symptoms
Observer	–Beginning	-.13	-.06	-.02	.05
	Middle	.02	.09	.24	.10
	Termination	.05	.05	.14	-.05
	Average	-.02	.03	.15	.04
Patient	–Beginning	-.20	-.24	-.13	-.14
	Middle	-.41*	-.45*	-.10	-.10
	Termination	-.42*	-.39*	-.09	-.09
	Average	-.42*	-.42*	-.12	-.14
Therapist	–Beginning	-.14	-.11	-.17	-.15
	Middle	-.20	-.10	-.11	-.04
	Termination	-.20	-.08	.02	.12
	Average	-.22	-.09	-.10	-.04

Note. 6-mo FU = 6-month follow-up; AQ = Alliance Questions measure. Bonferroni correction applied to each grouping of 8 General and Grief Symptom residual gain factor by perspective correlations ($p = .05/8 = .006$).

* $p < .006$, 2-tailed.

Table 21

Descriptive Statistics for the Member-Leader Bond Scale Subscales, by Phase of Therapy

Member-Leader Bond Scale	*M*	*SD*	Range	*N*
Positive Qualities				
Beginning	4.37	1.06	1.00 – 6.00	98
Middle	4.70	.97	1.67 – 6.00	97
Termination	4.80	1.13	1.00 – 6.00	95
Overall Average	4.61	.95	1.00 – 6.00	99
Dissatisfaction				
Beginning	2.91	1.21	.33 – 6.00	98
Middle	2.93	1.21	.33 – 6.00	97
Termination	2.89	1.30	.33 – 6.00	95
Overall Average	2.90	1.01	1.00 – 5.78	99
Compatibility				
Beginning	2.02	.94	1.00 – 4.33	97
Middle	2.28	.87	1.00 – 5.00	97
Termination	2.41	1.11	.33 – 5.33	95
Overall Average	2.23	.84	1.00 – 4.44	99

Table 22

Descriptive Statistics and *t* tests for the Member-Leader Bond Scale Subscales, by Gender and Phase of Therapy

		Men				Women					
Member-Leader Bond Scale		*M*	*SD*	Range	*n*	*M*	*SD*	Range	*n*	*t*	*p*
Pos Qual	–Beginning	4.30	1.20	1.00 – 6.00	20	4.39	1.03	2.33 – 6.00	78	-.32	.75
	Middle	4.67	.99	3.00 – 6.00	18	4.71	.99	1.67 – 6.00	79	-.18	.86
	Termination	4.68	1.47	1.00 – 6.00	19	4.83	1.04	2.00 – 6.00	76	-.50	.62
	Average	4.51	1.23	1.00 – 5.89	20	4.64	.88	2.55 – 6.00	79	-.54	.59
Dissat	–Beginning	2.52	.91	1.33 – 4.33	20	3.01	1.26	.33 – 6.00	78	-1.61	.11
	Middle	2.76	1.37	.33 – 5.33	18	2.97	1.18	.67 – 2.97	79	-.65	.52
	Termination	2.74	1.25	.33 – 6.00	19	2.93	1.32	.67 – 5.67	76	-.58	.57
	Average	2.65	.81	1.44 – 4.22	20	2.96	1.05	1.00 – 5.78	79	-1.21	.23
Compat	–Beginning	2.27	1.06	1.00 – 4.33	20	1.95	.90	1.00 – 4.33	77	1.34	.18
	Middle	2.30	.79	1.00 – 4.00	18	2.28	.89	1.00 – 5.00	79	.07	.94
	Termination	2.61	1.05	1.00 – 4.33	19	2.35	1.12	.33 – 5.33	76	.91	.37
	Average	2.37	.87	1.00 – 4.22	20	2.20	.84	1.00 – 4.44	79	.79	.43

Note. Pos Qual = Positive Qualities; Dissat = Dissatisfaction; Compat = Compatibility
* $p < .004$, 2-tailed, after Bonferroni correction ($p = .05/12$ variables = .004).

Table 23

Descriptive Statistics and *t* tests for the Member-Leader Bond Scale Subscales, by Treatment Condition and Phase of Therapy

		Supportive				Interpretive					
Member-Leader Bond Scale		*M*	*SD*	Range	*n*	*M*	*SD*	Range	*n*	*t*	*p*
Pos Qual	–Beginning	4.73	.97	1.00 – 6.00	51	3.98	1.02	2.33 – 6.00	47	3.74	.00*
	Middle	5.02	.82	3.00 – 6.00	50	4.36	1.00	1.67 – 6.00	47	3.62	.00*
	Termination	5.06	1.08	1.00 – 6.00	50	4.51	1.13	1.30 – 6.00	45	2.41	.02
	Average	4.91	.91	1.00 – 6.00	52	4.28	.90	2.33 – 6.00	47	3.50	.00*
Dissat	–Beginning	2.51	1.14	.33 – 6.00	51	3.36	1.13	1.00 – 5.67	47	-3.70	.00*
	Middle	2.52	1.10	.33 – 5.33	50	3.36	1.19	.67 – 6.00	47	-3.63	.00*
	Termination	2.53	1.19	.33 – 6.00	50	3.30	1.30	1.00 – 5.67	45	-3.02	.00*
	Average	2.51	.88	1.00 – 4.89	52	3.34	.96	1.00 – 5.78	47	-4.45	.00*
Compat	–Beginning	2.14	1.00	1.00 – 4.33	50	1.88	.86	1.00 – 4.33	47	1.37	.17
	Middle	2.51	.89	1.00 – 5 00	50	2.03	.79	1.00 – 4.00	47	2.83	.01
	Termination	2.81	1.01	1.00 – 5.33	50	1.96	1.04	.33 – 4.00	45	4.04	.00*
	Average	2.49	.84	1.00 – 4.44	52	1.96	.76	1.00 – 3.89	47	3.27	.00*

Note. Pos Qual = Positive Qualities; Dissat = Dissatisfaction; Compat = Compatibility
* $p < .004$, 2-tailed, after Bonferroni correction ($p = .05/12$ variables = .004).

Table 24

Intercorrelations for the Member-Leader Bond Scale (MLBS) Subscales Across Phases of Therapy ($N = 93 - 98$)

		MLBS											
		Positive Qualities (Pos Qual)				Dissatisfaction (Dissat)				Compatibility (Compat)			
MLBS		Begin	Mid	Term	Average	Begin	Mid	Term	Average	Begin	Mid	Term	Average
Pos Qual	–Begin	--	.65*	.63*	.86* (.68*)	-.22	-.20	-.17	-.23	.22	.19	.42*	.34*
	Mid		--	.64*	.88* (.72*)	-.29*	-.29*	-.30*	-.36*	.25	.34*	.42*	.40*
	Term			--	.86* (.66*)	-.29*	-.33*	-.29*	-.37*	.26	.30*	.48*	.42*
	Av				--	-.30*	-.32*	-.27	-.35*	.28	.33*	.51*	.45*
Dissat	–Begin					--	.54*	.44*	.82* (.59*)	.06	-.02	-.17	-.06
	Mid						--	.49*	.83* (.60*)	.12	.10	-.08	.03
	Term							--	.80* (.53*)	.01	-.05	-.10	-.06
	Av								--	.07	.00	-.15	-.05
Compat	–Begin									--	.62*	.55*	.83* (.63*)
	Mid										--	.72*	.89* (.77*)
	Term											--	.88* (.70*)

Note. The values in parentheses denotes r when duplication is removed. Underlining denotes 12 subscale phase intercorrelations and application of Bonferroni correction ($p = .05/12 = .004$). Begin = Beginning; Mid = Middle; Term = Termination; Av = Average.

* $p < .004$, 2-tailed.

Table 25

2 Gender (Male, Female) X 2 Treatment Condition (Interpretive, Supportive) Analysis of Variance for Member-Leader Bond Scale Subscale Ratings (*N* = 91)

		F		
Source	*df*	Positive Qual	Dissatisfaction	Compatibility
Between subjects				
Condition (C)	1	10.51**	12.39**	3.70
Gender (G)	1	.43	.15	.76
C X G	1	.00	.41	.31
S within-group error	87	(2.00)	(2.66)	(2.00)
Within subjects				
Phase (P)	2	6.14**	.30	3.00
P X C	2	.24	.62	4.88*
P X G	2	.02	.68	1.62
P X C X G	2	1.15	1.23	.34
P X S within-group error	174	(.40)	(.80)	(.35)

Note. Values in parentheses represent mean square errors. Positive Qual = Positive Qualities; S = subjects.
* $p < .05$ and ** $p < .005$, 2-tailed.

Table 26

Alliance Measure (MLBS) – Outcome Correlations by Perspective and Phase of Therapy

	Pre- to Post-therapy ($N = 95 – 99$)		Pre-therapy to 6-mo FU ($N = 62 – 65$)	
MLBS Subscales	General Symptoms	Grief Symptoms	General Symptoms	Grief Symptoms
Pos Qual –Beginning	-.17	-.10	-.12	-.15
Middle	-.13	-.16	-.13	-.22
Termination	-.26	-.21	.03	-.16
Overall Average	-.23	-.19	-.10	-.21
Dissatis –Beginning	.13	.25	-.05	-.04
Middle	.13	.24	-.01	.08
Termination	.27	.22	.06	-.00
Overall Average	.21	.29*	-.00	.04
Compat –Beginning	-.07	-.04	-.05	-.13
Middle	-.17	-.19	.06	-.04
Termination	-.11	-.00	.11	.02
Overall Average	-.15	-.09	.04	-.05

Note. 6-mo FU = 6-month follow-up; MLBS = Member-Leader Bond Scale; Pos Qual = Positive Qualities; Dissatis = Dissatisfaction; Compat = Compatibility. Bonferroni correction applied to each grouping of 8 General and Grief Symptom residual gain factor by perspective correlations ($p = .05/8 = .006$).

* $p < .006$, 2-tailed.

Table 27

Intercorrelations of Alliance Measures (AQ and MLBS) by Perspective and Phase of Therapy ($N = 84 – 98$)

		Member-Leader Bond Scale (MLBS) Subscales											
		Positive Qualities				Dissatisfaction				Compatibility			
AQ		Begin	Mid	Term	Average	Begin	Mid	Term	Average	Begin	Mid	Term	Average
Observer	–Begin	.08	.22	-.02	.09	-.19	-.04	-.15	-.16	.04	.18	.16	.15
	Mid	.17	.17	.21	.19	-.19	-.20	-.27	-.28	.25	.30*	.38*	.36*
	Term	.11	.11	.11	.12	-.18	-.09	-.16	-.19	.24	.30*	.28	.31*
	Av	.14	.20	.12	.16	-.23	-.14	-.23	-.25	.22	.31*	.33*	.33*
Patient	–Begin	.48*	.41*	.42*	.51*	-.20	-.10	-.03	-.12	.25	.23	.21	.28
	Mid	.44*	.52*	.42*	.53*	-.17	-.17	-.31*	-.27	.19	.27	.26	.29
	Term	.51*	.54*	.60*	.64*	-.19	-.09	-.27	-.23	.18	.33*	.36*	.35*
	Av	.56*	.60*	.58*	.67*	-.21	-.16	-.27	-.26	.23	.33*	.33*	.36*
Therapist	–Begin	.15	.16	.13	.17	-.17	-.09	-.11	-.14	.07	.01	.02	.04
	Mid	-.01	.06	.12	.06	-.04	-.11	-.27	-.09	-.00	.05	-.01	.01
	Term	.18	.20	.35*	.31*	-.07	-.06	-.33*	-.19	.16	.08	.12	.15
	Av	.14	.19	.27	.23	-.11	-.03	-.31*	-.18	.07	.03	.04	.06

Note. AQ = Alliance Questions measure; Begin = Beginning; Mid = Middle; Term = Termination; Av = Average. Underlining denotes 12 therapy phase intercorrelations and application of Bonferroni correction for each perspective ($p = .05/12 = .004$).
* $p < .004$, 2-tailed.

Table 28

Descriptive Statistics for the Group Climate Questionnaire-Short Form Engaged Subscale (GCQ-S Engaged), by Perspective and Phase of Therapy

GCQ-S Engaged	*M*	*SD*	Range	*N*
Observer				
Beginning	2.78	.83	.93 – 4.20	96
Middle	2.71	.80	1.00 – 3.67	99
Termination	2.74	.81	1.20 – 4.33	99
Overall Average	2.74	.61	1.42 – 3.84	99
Patient				
Beginning	3.90	.95	1.80 – 6.00	98
Middle	4.23	.79	2.40 – 6.00	97
Termination	4.55	.74	1.60 – 5.80	95
Overall Average	4.22	.69	2.67 – 5.80	99
Therapist				
Beginning	3.86	.95	1.60 – 5.20	99
Middle	4.03	.95	1.60 – 5.40	99
Termination	4.01	.80	2.00 – 5.40	99
Overall Average	3.96	.82	2.13 – 5.33	99

Table 29

Descriptive Statistics and *t* tests for the Group Climate Questionnaire-Short Form Engaged Subscale (GCQ-S Engaged), by Perspective, Treatment Condition and Phase of Therapy

		Supportive				Interpretive					
GCQ-S Engaged		*M*	*SD*	Range	*n*	*M*	*SD*	Range	*n*	*t*	*p*
Observer	– Beginning	2.63	.80	.93 – 4.07	52	2.96	.83	1.33 – 4.20	44	-1.95	.05
	Middle	3.02	.61	1.67 – 3.67	52	2.38	.86	1.00 – 3.67	47	4.28	.00*
	Termination	3.09	.54	2.20 – 3.67	52	2.35	.89	1.20 – 4.33	47	5.07	.00*
	Average	2.91	.35	2.02 – 3.20	52	2.54	.77	1.42 – 3.84	47	3.13	.00*
Patient	– Beginning	3.92	1.01	1.80 – 5.80	51	3.89	.90	2.00 – 6.00	47	.16	.88
	Middle	4.28	.83	2.40 – 5.80	50	4.18	.76	2.80 – 6.00	47	.58	.57
	Termination	4.69	.59	3.60 – 5.80	50	4.40	.85	1.60 – 5.80	45	1.96	.05
	Average	4.28	.69	2.97 – 5.60	52	4.14	.68	2.67 – 5.80	47	1.04	.30
Therapist	– Beginning	3.83	.96	1.60 – 5.00	52	3.89	.95	2.00 – 5.20	47	-.31	.76
	Middle	4.03	.84	2.60 – 5.40	52	4.02	1.08	1.60 – 5.40	47	.07	.95
	Termination	3.87	.76	2.00 – 4.40	52	4.15	.83	2.40 – 5.40	47	-1.76	.08
	Average	3.91	.77	2.13 – 4.87	52	4.02	.87	2.40 – 5.33	47	-.66	.51

Note. * $p < .004$, 2-tailed, after Bonferroni correction ($p = .05/12$ variables = .004).

Table 30

Intercorrelations for the Group Climate Questionnaire-Short Form Engaged Subscale (GCQ-S Engaged) Between Perspectives and Across Phases of Therapy ($N = 92 - 99$)

	GCQ-S Engaged											
	Observer				Patient				Therapist			
GCQ-S Engaged	Begin	Mid	Term	Average	Begin	Mid	Term	Average	Begin	Mid	Term	Average
Observer –Begin	--	.52*	.02	.69* (.31*)	.24	.11	.06	.17	.35*	.62*	.66*	.59*
Mid		--	.52*	.90* (.81*)	.07	-.04	.03	.03	.09	.38*	.39*	.31*
Term			--	.68* (.38*)	-.11	.00	.14	-.01	-.48*	-.11	-.09	-.26
Av				--	.09	.03	.10	.09	-.03	.39*	.40*	.27
Patient –Begin					--	.65*	.40*	.87* (.62*)	.23	.29*	.22	.27
Mid						--	.44*	.86* (.67*)	.09	.19	.13	.15
Term							--	.72* (.45*)	-.08	.02	.01	-.02
Av								--	.10	.20	.14	.17
Therapist –Begin									--	.69*	.68*	.88* (.72*)
Mid										--	.81*	.92* (.81*)
Term											--	.91* (.81*)

Note. Begin = Beginning; Mid = Middle; Term = Termination; Av = Average. The values in parentheses denote r when duplication is removed. Underlining denotes 12 therapy phase intercorrelations and application of Bonferroni correction ($p = .05/12 = .004$).
* $p < .004$, 2-tailed.

Table 31

2 Treatment Condition (Interpretive, Supportive) X 3 Phase (Beginning, Middle, Termination) Analysis of Variance for Group Climate Questionnaire-Short Form Engaged Subscale Ratings, for Each Perspective (*N* = 89)

		F		
Source	*df*	Observer	Patient	Therapist
		Between subjects		
Condition (C)	1	6.17*	.80	.17
S within-group error	87	(1.10)	(1.43)	(2.18)
		Within subjects		
Phase (P)	2	.36	22.79**	4.63*
P X C	2	21.16**	2.16	1.81
P X S within-group error	174	(.37)	(.35)	(.23)

Note. Values in parentheses represent mean square errors. S = subjects.
* $p < .05$ and ** $p < .005$, 2-tailed.

Table 32

Cohesion Measure (GCQ-S-E) – Outcome Correlations by Perspective and Phase of Therapy

		Pre- to Post-therapy ($N = 95 - 99$)		Pre-therapy to 6-mo FU ($N = 62 - 65$)	
GCQ-S-E		General Symptoms	Grief Symptoms	General Symptoms	Grief Symptoms
Observer	–Beginning	-.17	-.09	-.10	-.00
	Middle	.01	.02	.11	-.01
	Termination	.06	.00	.03	-.12
	Overall Average	-.04	.02	.02	-.06
Patient	–Beginning	-.27	-.29*	-.32	-.35*
	Middle	-.11	-.26	-.24	-.27
	Termination	-.13	-.20	-.15	-.14
	Overall Average	-.23	-.32*	-.31	-.32
Therapist	–Beginning	-.11	-.01	.08	.15
	Middle	-.16	-.05	.09	.13
	Termination	-.17	.00	.08	.14
	Overall Average	-.16	-.02	.09	.16

Note. 6-mo FU = 6-month follow-up; GCQ-S-E = Group Climate Questionnaire-Short Form, Engaged Subscale. Bonferroni correction applied to each grouping of 8 General and Grief Symptom residual gain factor by perspective correlations ($p = .05/8 = .006$).

* $p < .006$, 2-tailed.

Table 33

Alliance Measure (AQ) – Cohesion Measure (GCQ-S Engaged) Correlations by Perspective and Phase of Therapy ($N = 84 - 99$)

		Group Climate Questionnaire-Short Form Engaged Subscale (GCQ-S Engaged)											
		Observer				Patient				Therapist			
AQ		Begin	Mid	Term	Av	Begin	Mid	Term	Av	Begin	Mid	Term	Av
Observer	–Begin	.88*	.67*	.19	.77*	.24	.11	.14	.20	.39*	.59*	.67*	.60*
	Mid	.27	.79*	.49*	.68*	-.04	-.11	.07	-.03	.15	.22	.32*	.25
	Term	.04	.62*	.89*	.62*	-.07	-.01	.08	-.01	-.13	.09	.13	.02
	Av	.47*	.83*	.65*	.86*	.05	-.00	.12	.06	.15	.35*	.43*	.34*
Patient	–Begin	.15	.21	.08	.20	.49*	.29*	.41*	.49*	.03	.02	.04	.03
	Mid	.09	.03	.06	.07	.38*	.33*	.40*	.46*	.06	.04	.03	.05
	Term	.15	.16	.23	.24	.38*	.35*	.59*	.54*	-.03	.09	.06	.02
	Av	.14	.15	.15	.19	.48*	.39*	.56*	.59*	.01	.03	.04	.03
Therapist	–Begin	.06	.00	-.03	.01	.30	.07	.02	.23	.16	.12	.06	.13
	Mid	.17	.32*	.27	.33*	.10	.04	.22	.13	.05	.30*	.25	.21
	Term	.03	.16	.32*	.22	.06	-.09	.26	.10	-.02	.06	.14	.07
	Av	.06	.17	.24	.20	.18	.01	.32*	.19	.06	.15	.16	.14

Note. AQ = Alliance Questions measure; Begin = Beginning; Mid = Middle; Term = Termination; Av = Average. Underlining denotes 12 therapy phase intercorrelations and application of Bonferroni correction for each perspective ($p = .05/12 = .004$).
* $p < .004$, 2-tailed.

Table 34

Alliance Measure (MLBS) - Cohesion Measure (GCQ-S Engaged) Correlations by Perspective and Phase of Therapy ($N = 92 - 99$)

	Member-Leader Bond Scale (MLBS) Subscales											
	Positive Qualities				Dissatisfaction				Compatibility			
GCQ-S Engaged	Begin	Mid	Term	Av	Begin	Mid	Term	Av	Begin	Mid	Term	Av
Observer –Begin	-.07	.08	-.12	-.05	-.02	.11	.01	.04	.02	.07	.03	.03
Mid	.05	.09	.02	.05	-.14	-.06	-.13	-.13	.20	.23	.22	.25
Term	.10	.08	.06	.11	-.08	-.01	-.09	-.08	.20	.24	.18	.24
Av	.05	.11	-.01	.08	-.10	.02	-.09	-.07	.16	.23	.18	.22
Patient –Begin	.35*	.37*	.29*	.39*	-.18	-.23	-.04	-.18	.07	.02	.12	.09
Mid	.22	.39*	.25	.34*	-.17	-.24	-.24	-.27	.04	.08	.04	.07
Term	.34*	.36*	.36*	.41*	-.19	-.05	-.09	-.13	.10	.16	.12	.15
Av	.38*	.47*	.38*	.48*	-.21	-.23	-.14	-.24	.09	.10	.13	.15
Therapist –Begin	.02	.02	-.03	-.01	-.06	.01	-.14	-.08	-.02	-.00	.06	.02
Mid	-.00	.05	-.05	-.01	-.03	.11	-.11	-.01	.00	.06	.12	.07
Term	-.08	-.03	-.08	-.08	.01	.15	-.09	.03	.03	-.01	-.01	-.00
Av	-.02	.02	-.06	-.03	-.03	.10	-.13	-.03	.00	.02	.07	.03

Note. GCQ-S Engaged = Group Climate Questionnaire-Short Form, Engaged subscale; Begin = Beginning; Mid = Middle; Term = Termination; Av = Average. Underlining denotes 12 therapy phase intercorrelations and application of Bonferroni correction for each perspective ($p = .05/12 = .004$).

* $p < .004$, 2-tailed.

Table 35

Summary of Simultaneous Regression of General and Grief Symptom Outcome Residual Gain Factors on Process Variables Rated by Patients for Beginning Phase of Therapy

	Pre- to Post-therapy ($N = 89$)						Pre-therapy to 6-months Follow-up ($N = 57$)					
	General Symptoms			Grief Symptoms			General Symptoms			Grief Symptoms		
Patient –Beginning Phase	B	Beta	*t*	B	Beta	*t*	B	Beta	*t*	B	Beta	*t*
Intercept	1.14		.26	.59		.30	8.96		1.54	3.71		1.22
Treatment Condition	3.41	.29	2.39*	.84	.16	1.35	4.05	.30	2.10*	1.53	.22	1.51
Alliance Questions	-.30	-.05	-.40	-.25	-.10	-.77	.76	.11	.68	.40	.11	.70
GCQ-S Engaged	-.96	-.15	-1.26	-.52	-.19	-1.56	-2.57	-.38	-2.51*	-1.28	-.37	-2.39*
MLBS Pos Qual	-.67	-.12	-.92	-.02	-.01	-.08	-1.10	-.16	-1.10	-.32	-.09	-.62
MLBS Dissatisfaction	.80	.17	1.47	.51	.25	2.16*	-.19	-.03	-.25	.12	.04	.30
MLBS Compatibility	-.47	-.08	-.68	-.11	-.04	-.36	-.77	-.11	-.84	-.68	-.19	-1.42
R^2			.13			.14			.23			.20
Adjusted R^2			.07			.08			.14			.10
F			2.09			2.28*			2.49*			2.05

Note. B = unstandardized and Beta = standardized regression coefficient; GCQ-S Engaged = Group Climate Questionnaire-Short Form, Engaged subscale; MLBS = Member-Leader Bond Scale; Pos Qual = Positive Qualities.
* $p < .05$ and ** $p < .005$, 2-tailed.

Table 36

Summary of Simultaneous Regression of General and Grief Symptom Outcome Residual Gain Factors on Process Variables Rated by Patients for Middle Phase of Therapy

	Pre- to Post-therapy ($N = 90$)						Pre-therapy to 6-months Follow-up ($N = 62$)					
	General Symptoms			Grief Symptoms			General Symptoms			Grief Symptoms		
Patient –Middle Phase	B	Beta	*t*	B	Beta	*t*	B	Beta	*t*	B	Beta	*t*
Intercept	1.29		.27	2.44		1.19	9.51		1.24	5.43		1.39
Treatment Condition	3.05	.26	2.40*	.61	.12	1.11	2.63	.20	1.31	1.02	.15	.99
Alliance Questions	-1.54	-.33	-2.86**	-.79	-.37	-3.35**	.08	.02	.11	.15	.06	.39
GCQ-S Engaged	.30	.04	.37	-.50	-.15	-1.43	-1.81	-.21	-1.45	-.95	-.22	-1.50
MLBS Pos Qual	.01	.00	.01	.41	.15	1.21	-1.20	-.18	-1.06	-.78	-.22	-1.35
MLBS Dissatisfaction	1.11	.23	2.09*	.61	.28	2.62*	.03	.01	.03	.19	.07	.43
MLBS Compatibility	-1.87	-.28	-2.56*	-.82	-.27	-2.57*	-.02	-.00	-.02	-.22	-.06	-.40
R^2			.25			.31			.13			.14
Adjusted R^2			.20			.26			.03			.05
F			4.62**			6.27**			1.35			1.54

Note. B = unstandardized and Beta = standardized regression coefficient; GCQ-S Engaged = Group Climate Questionnaire- Short Form, Engaged subscale; MLBS = Member-Leader Bond Scale; Pos Qual = Positive Qualities.
* $p < .05$ and ** $p < .005$, 2-tailed.

Table 37

Summary of Simultaneous Regression of General and Grief Symptom Outcome Residual Gain Factors on Process Variables Rated by Patients for Termination Phase of Therapy

	Pre- to Post-therapy ($N = 94$)						Pre-therapy to 6-months Follow-up ($N = 61$)					
	General Symptoms			Grief Symptoms			General Symptoms			Grief Symptoms		
Patient–Termination Phase	B	Beta	*t*	B	Beta	*t*	B	Beta	*t*	B	Beta	*t*
Intercept	-2.96		-.71	.92		.46	.72		.10	3.08		.84
Treatment Condition	4.23	.36	3.54**	.93	.17	1.61	3.15	.23	1.61	1.00	.15	.99
Alliance Questions	-2.37	-.51	-3.90**	-.94	-.45	-3.20**	-.45	-.08	-.46	.05	.02	.09
GCQ-S Engaged	.79	.10	.88	.01	.00	.03	-1.92	-.18	-1.11	-.46	-.09	-.51
MLBS Pos Qual	.16	.03	.26	.03	.01	.10	.58	.09	.54	-.64	-.20	-1.15
MLBS Dissatisfaction	1.08	.24	2.43*	.32	.16	1.50	.78	.15	1.04	.01	.00	.02
MLBS Compatibility	-.31	-.06	-.53	.27	.11	.97	.30	.05	.35	.16	.05	.34
R^2			.32			.22			.09			.06
Adjusted R^2			.27			.16			-.01			-.05
F			6.75**			4.03**			.92			.57

Note. B = unstandardized and Beta = standardized regression coefficient; GCQ-S Engaged = Group Climate Questionnaire- Short Form, Engaged subscale; MLBS = Member-Leader Bond Scale; Pos Qual = Positive Qualities.
* $p < .05$ and ** $p < .005$, 2-tailed.

Table 38

Summary of Simultaneous Regression of General and Grief Symptom Outcome Residual Gain Factors on Process Variables Rated by Patients for the Overall Average Phase of Therapy

	Pre- to Post-therapy ($N = 99$)						Pre-therapy to 6-months Follow-up ($N = 65$)					
	General Symptoms			Grief Symptoms			General Symptoms			Grief Symptoms		
Patient –Average Phase	B	Beta	*t*	B	Beta	*t*	B	Beta	*t*	B	Beta	*t*
Intercept	-1.98		-.41	-.01		-.01	9.08		1.22	5.78		1.54
Treatment Condition	4.32	.37	3.57**	1.05	.20	1.93	3.19	.24	1.67	1.22	.18	1.27
Alliance Questions	-2.73	-.46	-3.49**	-1.24	-.46	-3.52**	.07	.01	.06	.30	.08	.50
GCQ-S Engaged	.38	.04	.39	-.37	-.10	-.87	-3.01	-.30	-2.04*	-1.43	-.29	-1.92
MLBS Pos Qual	.51	.08	.63	.69	.25	1.87	-.43	-.06	-.32	-.63	-.17	-.94
MLBS Dissatisfaction	1.62	.28	2.68*	.83	.32	3.07**	.23	.03	.24	.13	.04	.27
MLBS Compatibility	-.91	-.13	-1.25	-.23	-.07	-.70	.22	.03	.20	-.15	-.04	-.28
R^2			.29			.28			.15			.14
Adjusted R^2			.25			.24			.06			.05
F			6.31**			6.06**			1.68			1.53

Note. B = unstandardized and Beta = standardized regression coefficient; GCQ-S Engaged = Group Climate Questionnaire- Short Form, Engaged subscale; MLBS = Member-Leader Bond Scale; Pos Qual = Positive Qualities.
* $p < .05$ and ** $p < .005$, 2-tailed.

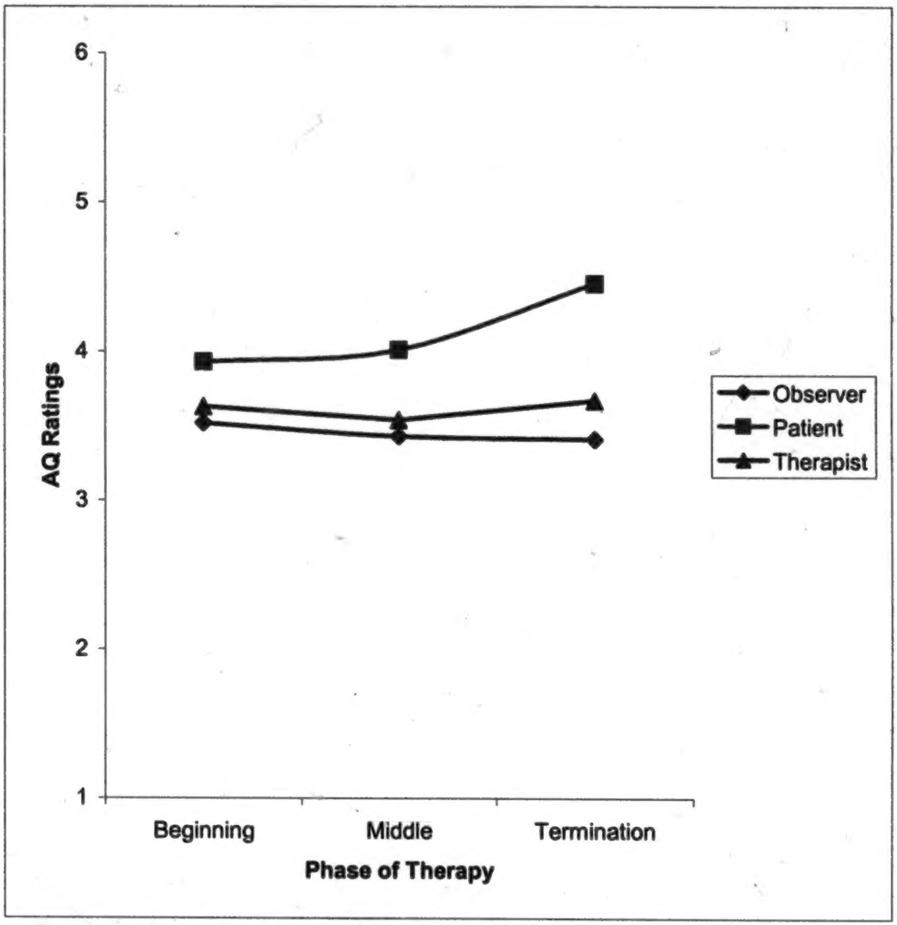

Figure 1. Alliance Question (AQ) Ratings by Perspective (Observer, Patient, and Therapist) and Phase of Therapy.

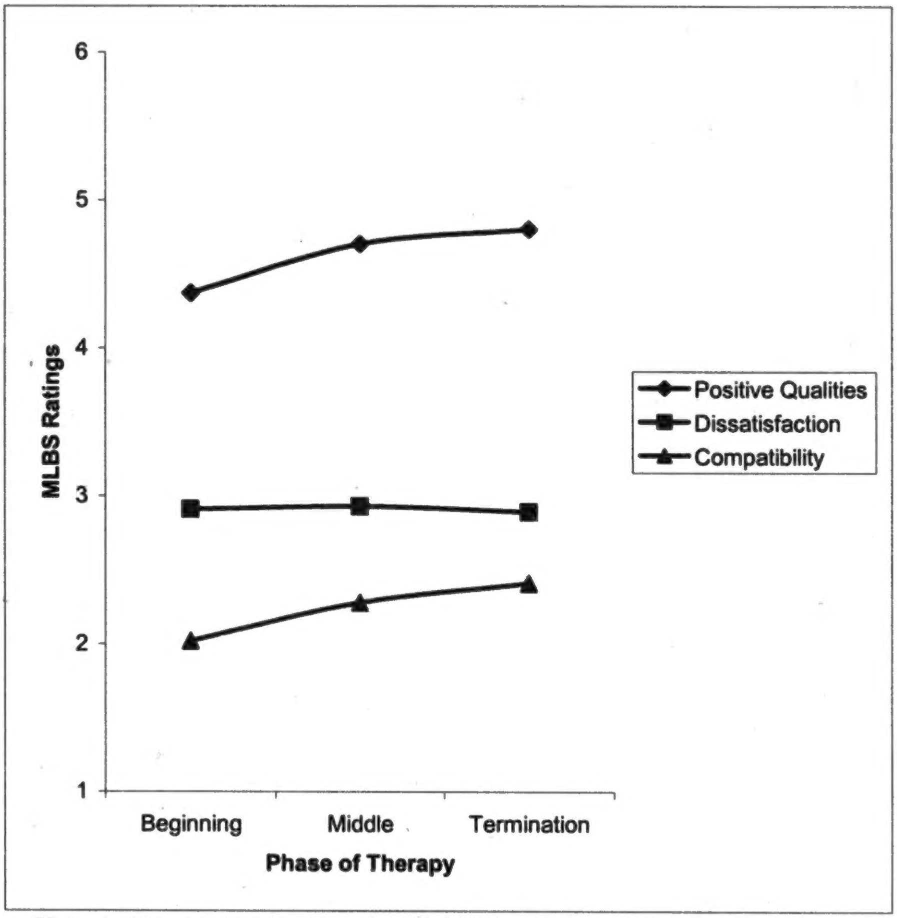

Figure 2. Member-Leader Bond Scale (MLBS) Subscale Ratings by Phase of Therapy.

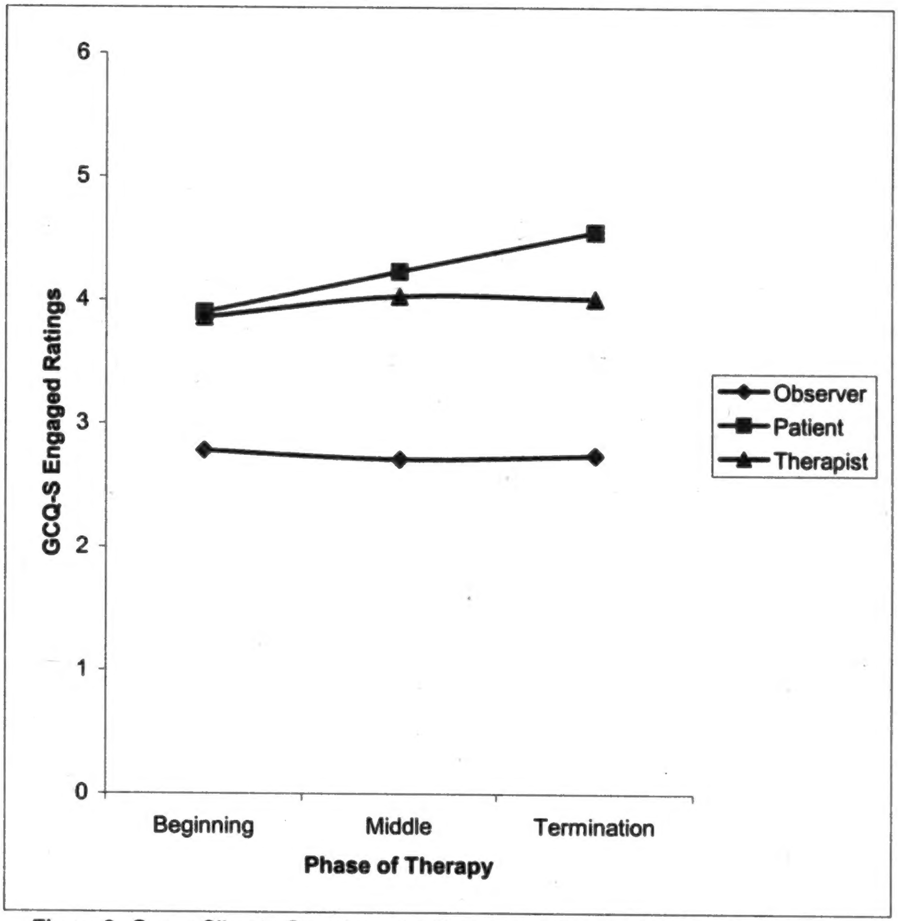

Figure 3. Group Climate Questionnaire-Short Form Engaged Subscale (GCQ-S Engaged) Ratings by Perspective (Observer, Patient, and Therapist) and Phase of Therapy.